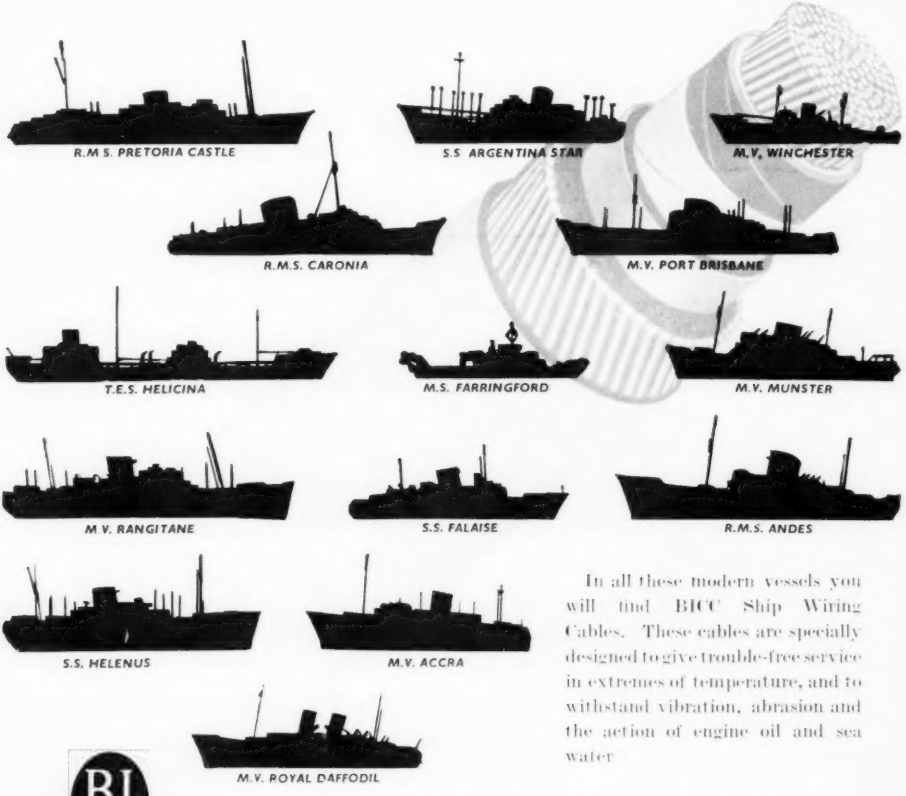
The
SHIPPING WORLD
AND SHIPBUILDING & MARINE ENGINEERING NEWS

VOL. CXXIV No. 3025 WEDNESDAY, JUNE 20, 1951 Price 1/6



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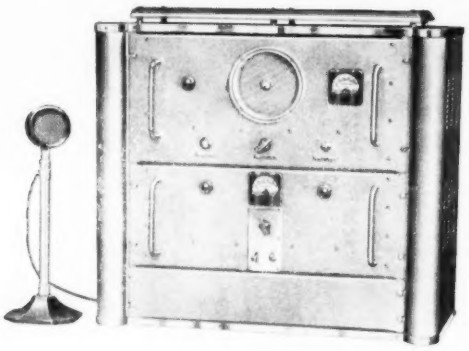

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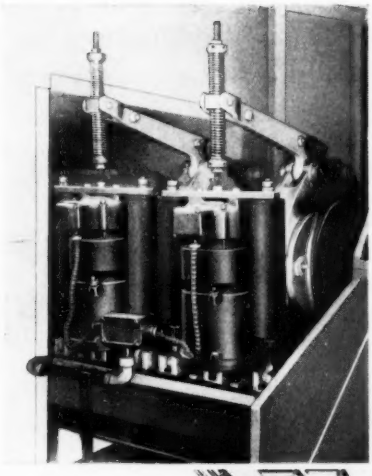

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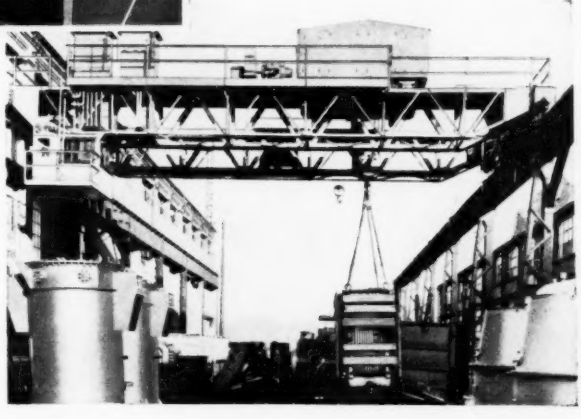

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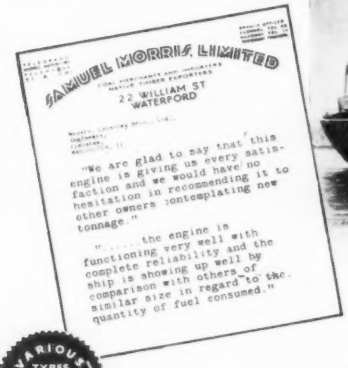
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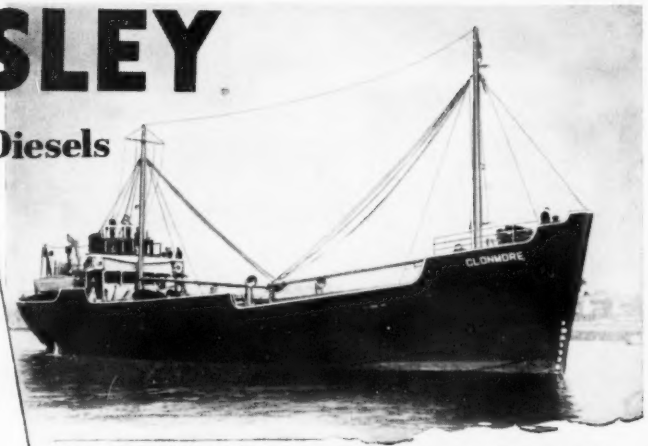

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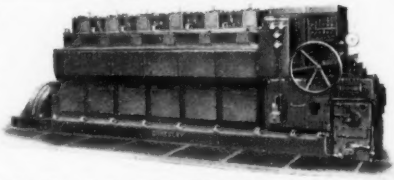

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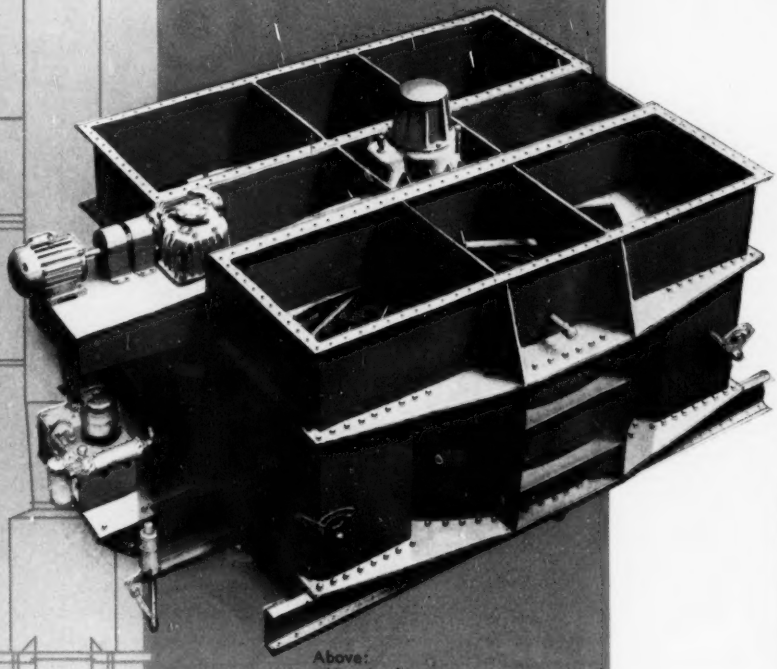

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Left:
a typical arrangement
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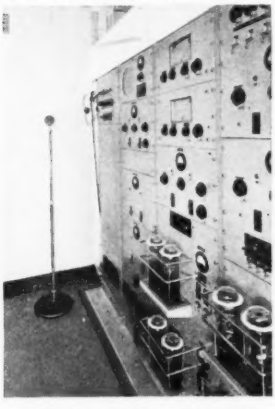

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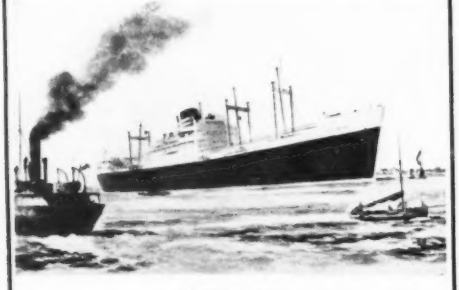

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from "SHIPPING WORLD" — MAY 30th, 1951

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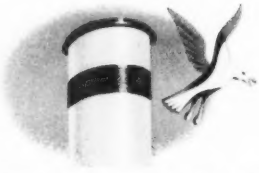

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Demand for passages was so great after the first world war that the Koninklijke Hollandsche Lloyd ordered the liners *Limburgia* and *Brabantia* — which later on became American property under the name of *Resolute* and *Reliance* — and some others. After 1930, however, the South American republics made immigration virtually impossible, and the Company withdrew from passenger traffic in 1934.

In 1936 complete financial reconstruction enabled the Company to develop their cargo services successfully and five of the Company's cargo ships were provided with refrigerated space.

At present the Royal Holland Lloyd owns and operates ten ships, all with geographical names ending in "—land": the motorship "Gaasterland", 4,650 gross register tons, is the latest. Delivery of another fast motor vessel, sister-ship of the m.v. "Gaasterland", is expected in 1951.

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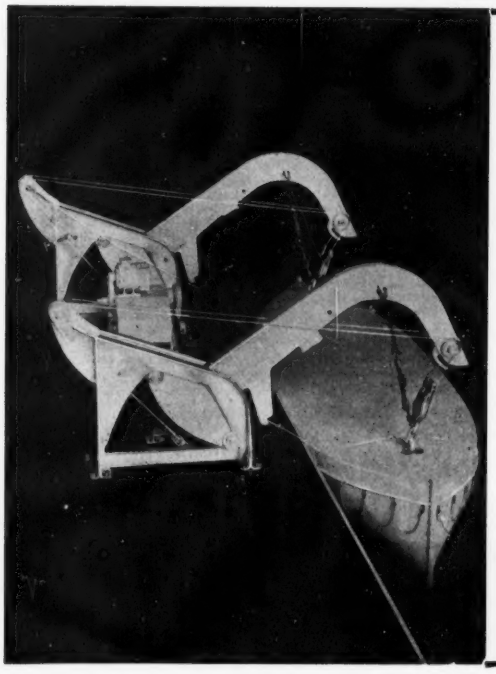

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	1914 (Mr. Lloyd George)			1939 (Sir John Simon)			1951 (Mr. Gaitskell)		
	£	s.	d.	£	s.	d.	£	s.	d.
Motor Spirit per Gallon			3			9		1	10½
Wine per Gallon . .		2	3		4	0		13	0
Mechanical Lighters		—			1	6		7	0
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THE SHIPPING WORLD

UNCERTAINTY IN SHIPBUILDING PROSPECTS

JUDGED SOLELY on the basis of ships now under construction and orders in hand, the prospects for British shipbuilding were never brighter, a belief which is strengthened by the high efficiency of the reorganised and modernised industry and its reputation with owners at home and abroad. Unfortunately, no man, firm or industry can predict his own future with certainty in these troubled times, when governmental policy in the months ahead may make the best industrial planning of no avail. The principal uncertainty for shipbuilding is that of steel supplies, to which Sir Frederick Rebbeck made some reference in his speech as chairman of Harland & Wolff, Ltd., reported elsewhere in this issue. He pointed out that for various reasons it was becoming increasingly difficult to obtain deliveries at the appropriate time of certain essential materials, the most important of these being steel. It was known that there were shortages of iron ore and scrap, Sir Frederick mentioned, and shipbuilders feared that they might not be able to count upon obtaining their full steel requirements. While it is possible to appreciate that shipbuilders may fear such adverse effects, remembering the time a year or two ago when shipyard production was curtailed for some months because of insufficient steel, such fears are related only to governments like that at present, whose particular form of planning is theoretical rather than practical in character.

What is the situation regarding steel supplies? The output of steel in Great Britain last year reached the record level of 16.3 million tons. Since then the major part of the industry has been taken over by the State, and the likely effect of this upon both production and price levels is a matter of personal opinion, though if his opinion be based upon experience with other nationalised industries, even the most dogmatic socialist must feel dubious. There are other factors, however, even more serious from a short-term—but not long-term—viewpoint. Imports of scrap are expected to be one-third of those obtained in 1950, while imports of iron ore, adversely affected by insufficient production from the nationalised coal mines, with the consequent need for importing coal rather than iron ore, are expected to be decreased by between seven and eight per cent. Despite these difficulties, it is hoped that steel production during the present year will approach 16 million tons. This is more than 300,000 tons less than 1950, and the requirements of rearmament have also to be met. How shipbuilding will fare is on the lap of the gods. It could with advantage produce more during this year if supplies permitted.

It must be repeated again and again that of all the calls upon steel supplies which will be made during the present and succeeding years, its use for building ships should be acknowledged as being primary. The term " armaments " is normally taken to include guns and tanks; as it is almost certain that these will be principally used in countries other than Britain, they will be of little avail without ships to transport them. A great part of the modern war machine now being forged by the North Atlantic Treaty Powers functions on oil of various kinds. It will be useless without the tankers to transport oil. While aircraft are now used for transport of troops for specialised purposes, the great bulk of troop movements is the work of passenger ships, providing steel supplies enable them to be built. It is essential that, in the event of war, the 50 million people in these islands be fed and clothed; this will not be possible without sufficient ships, both merchant and war. And, perhaps even more important during rearmament, when the extent of the defensive measures taken must bear a close relationship to a country's economy, it will not be possible to pay for the building of guns, tanks, aircraft and all the other needs of war unless the very considerable export earnings of British shipbuilding are kept at the highest level, and ships are provided to earn invisible exports. If these facts are kept in mind, in their proper perspective, there should be little fear that shipbuilding in Britain will be curtailed for lack of steel. Whether a government which introduced such a controversial measure as steel nationalisation at the beginning of a rearmament programme is capable of recognising the facts is another story.

Current Events

" Healthy Competition "

IN DISCUSSING the rise in the prices, the President of the Board of Trade has declared that he believes in the effect of " healthy competition ". That is a new doctrine to be declared from Whitehall these days. It is remarkable for two reasons. In the first place, the Government has created monopolies—that is, it has ruled out " healthy competition "—in the case of coal, of inland transport by road, rail or canal, of gas and electricity and, finally, of steel. The authorities set up to carry on these industries pass on automatically their higher costs to their customers, who, owing to the absence of competition, have no alternative but to grumble and pay up. These charges have gone a long way to add to the cost of everything, including shipbuilding and engineering. Furthermore, the Government has laid bigger burdens on the local bodies, the county, district and parish councils, in the matter of responsibility for education and other social services which have to be borne, willy nilly, and in large measure borne by industrial firms. So far as private enterprise is concerned in supplying the nation with

what it wants, 60 per cent of the prices are controlled and the "healthy competition" consists in the relative efficiency with which goods are produced and services rendered by the various firms concerned. Those are the facts. But when agitators claim that these firms which compete against each other in the various trades are, to put it bluntly, profiteering, they must look, first, to the Government which has created the monopolistic basic industries, forced up rates and instituted price controls, for an explanation of the rises in prices of ships and other things. With the assistance of capitalistic America, which has subscribed thousands of millions of pounds to the project, it has founded a Socialistic system—what is known as the Welfare State—in which everyone, hard worker and slacker, is guaranteed security from the cradle to the grave. That all-embracing insurance costs money, and a large part of that money the Government compels industrial managements to collect regularly without,, of course, charging the Treasury for that service. Consequently, the worker and the consumer pays.

Costs are Rising

It is in these circumstances that trade union leaders, protesting against the rising cost of living, are pressing for bigger pay packets. These men should know by this time that they cannot get "something for nothing". The benefits provided by the Welfare State have to be paid for; the cost is going up month by month and will continue to go up unless the brake is applied. If that is done, ships and sea transport and everything else will be cheaper and the pay packet will go further in maintaining a reasonable standard of living. But, if wages are increased still further, so will the purchasing power of each pound in every pay packet buy less of the goods and services of the State monopolies and of private enterprise firms, in spite of the system of controls enforced by the Government itself, which, under pressure from the unthinking rank and file of trade unionists, has abandoned its policy of wage restraint. In these circumstances, the inflationary movement will continue, especially as no real effort has been made to sweep away out-of-date restrictive practices. President Peron of Argentina, who is an economist of the new school, recently made a wise remark—"When every workman produces a bit more by his work, he is contributing to the happiness of all". That is a text on which members of the present Government could preach some good sermons in shipyards, factories and workshops.

The Persian Trouble

THERE HAS been no doubt from the first that the Soviet's agents stirred up the oil trouble in Persia, exciting the mob to denounce the British Government and the Anglo-Iranian Oil Company, to which they owe the foundation of the industry at a great expenditure of capital in research and equipment, and its successful development, which has provided the Shah's administration with a large share of the money which has been spent on modernising a very poor and backward nation. Now the Russians have tacitly admitted that they have spurred on the agitators. The latest move has been an offer to buy—of course, at their own price—the oil which the oilfields produce. But their campaign has not gone as well as they expected owing to the conciliatory attitude which Sir William Fraser and his colleagues have adopted. They have stated that they are willing to discuss the future arrangements on the assumption that the industry has, like our own basic industries, been nationalised. At last the deputy chairman, Mr. B. R. Jackson, and three of his colleagues have gone to Teheran on a goodwill mission, even though before they arrived there the Persian flag had been hoisted at Abadan. Mr. Jackson has made no secret of the liberal policy which they are prepared to discuss with the new Persian masters. He has stated categorically that there is a limit beyond which the company will not go. As to profits, they were prepared to accept a 50-50 basis, but not beyond that equal participation. Mr. Jackson made it clear that the company could get on without Persian oil. He admitted that the closing of the Abadan plant, which cannot be worked without well trained technicians, would mean a loss to the company of 300,000 barrels of refined products daily—a serious loss, but one that they could make up elsewhere in two or three years. He explained that so far as crude oil was concerned, the output at Kuwait could be doubled within a year. The tanker fleet alone, consisting of 150 ships and 150 more on charter, was a fine business and the company could operate the fleet profitably by chartering out to other producers. Finally, Mr. Jackson said that the world was just beginning to face over-production and competition in the oilfields and that there were the first faint signs of a world surplus. Unless the Persian Government has fallen once and for all under Russian influence, there is still a well grounded hope that the Persians will see on which side their bread is buttered and be willing to accept the generous terms which the company is prepared to offer on the understanding that nationalisation be regarded as a *fait accompli*. Under such a regime as the company is ready to accept, both parties would fare well, especially since the time is at hand when the supply of oil in the world may exceed the demand.

The Outlook for Steel

IT MAY be only a coincidence that, following upon nationalisation of the main part of the steel industry, production has been declining. Of course, supplies of ore and scrap have fallen off to some extent, but that was foreseen by the steelmakers some time ago. But not by the planners. It was predicted that the output would be between 16,000,000 and 16,250,000 tons, whereas it is now running at the rate of 15,864,000 tons. What policy will be adopted? Will the new administration be permitted by the Government to reduce exports, thus throwing further out of balance the national trading account so as to maintain home supplies for the maritime industries generally, now with such healthy order books? A good deal of scrap could be collected from industrial works and even from domestic premises if an energetic drive were organised but, owing to high charges for collection and transport, it would not be cheap. It has been suggested that the chief sources of possible relief are, first, an increase in the arrivals of imported iron ore, and to some extent of scrap, with the release of shipping from the transport of this season's Atlantic coal shipments, and, secondly, the expansion of consumption of home ores. These are possibilities rather than probabilities, and again, the cost will not be low. It looks as though there will be a steel squeeze in this country with a consequent rise in prices. As the demand at home will exceed the supply, what action will the new authority, working hand in hand with the Government, take in order to deal with the situation? *The Economist* has suggested an answer:—

> It seems likely that allocation of general steel, as well as of strip and sheet is imminent, and that the system adopted may be tighter than the pattern of general priorities between separate industries that has been suggested within the industry for some time past. Detailed control of steel distribution will be arduous and far from watertight, as past experience proves; nevertheless, the indications are that something comparable to the old "M form" system is firmly in the official mind, with certain modifications to avoid the grosser anomalies that became evident during its operation.
>
> Such a system could hardly be brought into operation before the autumn, whenever an announcement is made; it appears, in fact, that the Ministry may be attempting to elaborate its plans in complete detail before it makes any statement.

The Dock Strikes

THE Ministry of Labour has never attached adequate importance to the succession of dock strikes, which have cost the country, and shipowners in particular, many million pounds. The dock scheme, which abolished

casual labour, having been put into operation, the Minister and his officials have been inclined to stand aside, telling the National Dock Labour Board and the various subsidiary authorities to get on with the job. The old order of things had generally worked well and shipowners, wondering whether the new one would be a success, decided to give it a chance; on the other hand, a large proportion of the dockside workers regarded it from the first with suspicion, though it had been accepted by their overlords, the top-notch trade union leaders. It soon became apparent that the discontent among the dockers was being used by agitators as an excuse for strikes. First at one port and then at another, London, Liverpool, and others, shipping has been held up and the smooth working of our economic system interrupted, at a heavy loss. The new Minister of Labour, Mr. Alfred Robens, has shown better judgment than his weak-kneed predecessor in office, but not until the tally clerks in the London docks had been on strike for several days, paralysing shipping, did even he intervene. From the first, the tendency has been to leave the matter to the overlords at Transport House, whom no mean proportion of the dockers and other employees are no longer prepared to accept as dictators of policy. There was no excuse for what is called the unofficial strike of tally clerks. The necessity for taking on more tally clerks was a matter of fact that could have been quickly settled round the conference table. These men, however, had no confidence in their overlords and so they decided, without regard to the loss suffered by their fellow countrymen, to refuse to work.

An International Problem

WHEN will effective action be taken to deal with this international trouble, which is resulting in so great a waste of tonnage owing to the slow turnround of ships? One M.P. asked the Minister of Transport the other day whether he was aware that the time required to turn round ships in United Kingdom ports was approximately 40 per cent longer than before the war, despite the installation of labour-saving machinery, and if he would cause a special investigation to be made into the causes and take steps to remedy the situation. Mr. Barnes hedged after the manner of Ministers. He replied that in view of the very different circumstances obtaining in shipping and cargoes today as compared with before the war, no reliable statistics of comparative shipping turnround times are available. He added that his department was, in consultation with the Chamber of Shipping of the United Kingdom, the Liverpool Steam Ship Owners' Association, the National Association of Port Employers, the Dock and Harbour Authorities' Association, and the British Transport Commission, with a view to establishing a system of turnround statistics on a uniform basis. He recalled that special investigations into shipping turnround problems had already been made by working parties. The recommendations of the working party on the turnround of shipping had been brought to the notice of all concerned, and had secured a wide measure of acceptance and adoption. The report of the working party on port mechanisation was now, he concluded, being considered in consultation with national organisations. So much for official excuses. We never had much faith in " working parties," which too often cloak the truth in the attempt to please all parties. And, in the meantime, the wastage of tonnage in many of the principal ports of the world continues unchecked, no doubt to the delight of the conspirators behind the Iron Curtain.

Canal Dues

THERE is much satisfaction that the hopes of British, American and other shipowners regarding a possible reduction in Suez Canal dues have been realised. Since the war traffic through the Suez Canal has attained unprecedented levels and the company's revenues have increased accordingly. Shipowners have naturally looked to the company, which is in the nature of an international trust, to share the benefits of increased traffic and revenue in the form of a reduction in dues. If the company has not been able to do so before now, it is because so much large capital expenditure has been incurred in recent years in improving the facilities of this great waterway. This work includes the deepening of the canal by 2 ft. and the cutting of a new by-pass which will be in service before long. The present programme is expected to cost some £4,500,000. Meanwhile the operating costs of the canal have been increasing, yet the company has been able to refrain from increasing its dues at any time since 1941, when they were fixed at 39 Egyptian piastres per ton for loaded ships and 19.5 piastres for vessels in ballast. With effect from September 15 these dues will be reduced to 36.5 and 17 piastres per ton respectively. The dividend on Suez Canal shares this year has been raised from 7,500 to 8,750 francs, but it is estimated that the increase in dividend will cost the company more than the reduction in dues. The annual meeting was held in Paris on June 12, and the reductions will not come into effect until September because three months' notice is required for any alteration. In the case of the Panama Canal, there is reason to believe, unfortunately, that the Company will shortly be asking for an increase in canal tolls to come into effect by the beginning of 1952.

An Impressive Balance Sheet

THE Houlder group comprises the Houlder Line, the Alexander Shipping Company and other interests, having a large share in the refrigerated meat trade from the River Plate and extending into freight contracting, insurance and merchanting. The company is itself a member of the Furness, Withy family. Its trading profits declined in the calendar year 1950 from £906,000 to £697,000, a fall which no doubt reflects last year's trade dispute between this country and Argentina. Gross dividend and interest receipts were also down, at £125,000 against £180,000. Provisions no longer required and brought to credit contributed £50,000, compared with £56,000, and, as the depreciation charge is reduced from £655,000 to £247,000, adequate cover was left for the maintained dividend of 11 per cent, even after a transfer of £224,000 to the taxation equalisation account. In addition, ordinary shareholders received, last February, a special distribution of 5 per cent not subject to tax. The group balance sheet is an impressive document totalling £8,379,000, of which the fleet accounted for £3,260,000 after depreciation and writings off, and trade investments for £1,111,000. Current assets of £3,340,000 included £1,218,000 in cash and £923,000 in quoted investments; they exceeded current liabilities and provisions by £1,731,000. In assessing the liquid position of the group, however, it must be noted that, at the end of the year, there were capital commitments of £1,665,000. Reserves and carry forward of £2,963,000 are a comfortable protection for the issued ordinary capital of £800,000. Results should show a marked recovery this year: freight rates are once more remunerative and the River Plate meat trade has been resumed. Costs, of course, continue to rise, but profit margins are still adequate.

Clean Bills of Lading

WHILE the main theme of discussions at last week's Lisbon Conference of the International Chamber of Commerce was " Economic Development in a Period of Rearmament," the matter of most immediate importance to shipowners which figured on the agenda was the revised text of the definition of a " clean " bill of lading. This was down for confirmation rather than adoption, for the text was virtually agreed by a special commission of the Chamber after the initial draft had undergone some modification, largely at the instance of British banking interests. The revised wording is actually more than a definition. It opens

with the statement "Shipping documents bearing reservations as to the apparent good order and condition of the goods and the packaging may be refused": this lays down a broad principle with which none can quarrel. The draft goes on to say that documents should not be refused merely because they contain clauses which do not expressly state that the goods or packaging are unsatisfactory; which emphasise the carrier's non-liability for risks arising through the nature of the goods or packaging; or which disclaim on the part of the carrier knowledge of contents, weight measurement, quality of technical specification of the goods. These exceptions are reasonable. A bill of lading is not unclean merely because it records that goods are packed in secondhand cases or used drums. If such packings are such that the particular goods they contain are not considered properly packed, the bill of lading would be expressly clausued to that effect. The real definition of the revised text comes at the end. It is simple and clear, reading: "A clean bill of lading is one which bears no superimposed clauses expressly declaring a defective condition of the goods or packaging." It is known to have the approval of British shipowning and marine insurance interests and it is one which has been accepted by British banking interests.

Introducing Containers

THE BENEFITS to be gained from the use of cargo containers are obvious, and are fairly generally appreciated; but so are the disadvantages, of which the most obvious are the cost of the containers and the difficulty of interesting a sufficient number of shippers to give a container service a good start off. One container service is now being operated by the United Steamship Company between islands in Denmark, and interest elsewhere in the possibilities of containers is shown by one of the questions included in a circular sent to shippers in the United States recently by a sub-committee of the Pacific Coast Association of Port Authorities. This question reads: "Would a container service offered by intercoastal lines, whereby you would load and unload containers at your plant and carriers would transport carriers without breaking seals, be attractive?" The report of this sub-committee on this and other points will be made in July, and it will be interesting to see the response to this question. The American intercoastal trade is, of course, one which fulfils better than most one of the important conditions for a successful container service—that there should be packaged cargo, capable of being stowed in containers, moving in both directions. Even where this is not so, a good case can be made out today for the use of containers. Loading and discharging times would be considerably reduced, with obvious savings to the shipowner; pilferage would be entirely prevented, which would benefit the shipper and should enable lower rates to be charged for insurance; no additional packaging would be required, other than that in which the goods are sold; and finally, goods would be saved from damage by weather or crushing, a point the importance of which has been emphasised by photographs published recently showing conditions in South American ports.

Naval Gas Turbine Craft

WORK has been completed on the installation of a gas turbine in a Naval harbour launch. The turbine, which has been manufactured by the Rover Company, Ltd., is generally similar to those installed last year by the company for experimental purposes in the launch *Torquil*. It was reported at the time that the Admiralty had ordered a small number of these gas turbines, and the one fitted in this harbour launch is presumably the first of these to be given sea trials by the Admiralty. Since both the *Torquil* and the first gas turbine craft of all, M.T.B. 2009, had auxiliary engines which could be used if required, it seems that Harbour Launch 3964 may claim to be the first craft to be propelled solely by a gas turbine. The turbine develops about 100 h.p., and replaces a diesel engine of similar power. But whereas the diesel engine weighed 2½ tons, the gas turbine weighs only 600 lb. This comparison, however, is not altogether fair, as from the fact that the gas turbine uses four times as much fuel as the diesel it is clear that no heat exchanger has yet been fitted. At the time of the *Torquil* demonstrations, it was stated that work on the development of a satisfactory heat exchanger was proceeding. In the meantime, however, it is the intention of the Admiralty to investigate the maintenance aspects of gas turbines at the lower end of the power range, and it is for this purpose that H.L. 3964 has been fitted out. In company with M.T.B. 2009 (now reclassified M.T.B. 5559), she is on view on the Thames this week, which has been designated Festival of Britain Gas Turbine Week. In addition to carrying out research work on this end of the gas turbine power range, the Admiralty is investigating its use for the provision of larger powers, and a frigate, the *Hotham*, is to be fitted with one experimentally. At present she has twin-screw turbo-electric propulsion.

"Miss Britain III"

MR. HUBERT SCOTT-PAINE'S motor boat *Miss Britain III*, which has been presented to the National Maritime Museum, is worthy to take its place there among the many other famous exhibits. The boat has one claim to fame as the first motor boat to be built entirely of metal, but it is as the progenitor of a long line of fast craft, culminating in the Coastal Forces craft of the last war, that *Miss Britain III* will be chiefly remembered. In 1933 this boat was the medium for the installation of the first aero engine to be converted for marine use. This engine, a Napier Lion, was also the pioneer of a long line, including the Rolls-Royce Merlin and the Packard engine used chiefly in Coastal Forces. This original engine is at present being exhibited at a series of Festival of Britain exhibitions around Liverpool, but from September onwards it will be shown beside the hull of the boat at Greenwich. It is, perhaps, a fair comment that Hubert Scott-Paine was too successful. He saw clearly the possibilities inherent in the hard chine stepped hull, and with his undoubted qualities of salesmanship was able to get his ideas adopted by the Admiralty. Had there been, however, as able a protagonist for the round bilged, diesel-engined type of craft, and had as much money been spent on the development of this as was spent on the other, Coastal Forces might have been an even more potent factor in winning the war than in fact they were. The weight factor is inevitably critical in hard chine craft, while it is equally inevitable that in the course of a war the equipment fitted in all vessels will steadily increase in weight. The petrol engine, too, is not an ideal power unit. As a result, in the absence of a suitable high-speed diesel engine such as the Germans possessed, we were forced to the rather desperate experiment of the steam gunboats. We have learnt by experience, and since the war a suitable diesel engine has been developed.

SAYINGS OF THE WEEK

THE SHORTAGE OF STEEL

One of our steam tankers is to be put through one of her periodical surveys at a figure which may well be in excess of her original cost. We have had to give this extensive job to a Continental yard, owing to the inability of the shiprepairers in this country to get the necessary amount of steel."—*Mr. Claude C. Jacobs*, chairman of John I. Jacobs & Co., Ltd.

"A year ago it was possible to record that the supply position of essential materials used in shipbuilding was helping to expedite the construction of ships, but the position has now changed, and owing to shortages of scrap and iron ore shipbuilders fear they may not be able to count on obtaining their full steel requirements."—*Sir Frederick Rebbeck*, chairman and managing director of Harland & Wolff, Ltd.

ON THE "BALTIC"

A SCHEME FOR LAYING UP TRAMP SHIPPING

By BALTRADER

IT IS a matter of years since British shipowners, or a majority of them, decided that a laying up scheme should be set up. The success of the Schierwater plan in the case of tankers, which was in operation in the prewar slump, was not forgotten. The principle, of course, is to adjust the supply to the demand for tonnage in commission when cargo is not moving in large volume. Shipping is bound to be in excess when trade is slack if it is to be anything like equal to requirement when, as happens at irregular intervals, there is urgent demand from all quarters. The dire effect of too many ships in search of too few cargoes was seen in the 1930s, when heavy losses were incurred in a large proportion of the voyages undertaken. It was almost impossible to raise capital to build new tonnage and the shipyards were condemned to idleness. A lapse of some years' duration in the normal replacement and increase of our Merchant Navy found us insufficiently equipped in one of the most vital elements of war power. The disastrous unemployment in shipbuilding and its multitudinous ancillary industries, as well as the interruption in the renewal of the merchant fleet, showed that a stabilising influence was needed, similar to the action of a flywheel. One is apt to forget the struggle for survival in which many of the best managed tramp shipping companies were involved for a number of years before the last world war; only the best and most economical of their vessels could be employed without probable loss. Rates of freight were quite insufficient to cover the eventualities which often mar the result of a voyage. Many of the less trustworthy ships were laid up all round the coast, but too many were still being operated owing to the cost of laying up and to hopes of improvement in the market.

Setback to Owners and Crews

The extensive laying up to which shipping firms were forced was a great setback to the owners, but even more to the officers and men who were deprived of their jobs. At the same time there is no doubt that ships which are not needed should be laid up and that provision should be made for doing so. For this purpose a fund has to be in existence when it is necessary to withdraw some ships and their personnel from sea service. The proposal is that all ships which are employed and whose owners are parties to the scheme should contribute from their earnings to a pool. From this, owners and men will be compensated in event of their ships being withdrawn from service. It may be argued that there is no need to worry about the employment of the shipyards which are fully booked for several years; but it is impossible to foresee what may happen to the freight markets in the meantime. An unchecked slump in earnings, if it occurred, would affect the shipbuilding industry in the same way as it did between the wars. The object should be to ensure a continued confidence in the future on the part of shipowners and investors. A steadily modernised fleet will be the result, available for any emergency.

Regular Replacement

In my opinion, although this differs from that of high authority, the regular replacement of the British tramp fleet is not best financed through the sale of old ships to foreign buyers who may operate them in competition under unfair conditions. A laying up scheme might, perhaps, include a fund to compensate, to some extent, the owner who sold for scrap. Contributions could be graded to conform to the average age of an individual fleet—the older the ships the higher the contributions.

If it is agreed that a fund should be built to assist the laying up of redundant tonnage it is obvious that a slump, if and when it came, would be the worst time in which to levy subscriptions. The whole purpose of the scheme would be to enable the industry to emulate the camel which stores in the oasis what it will need in the desert. For a considerable period shipping has had the means to contribute to a fund in spite of the handicap of heavy taxation. It will be a pity if technical or other hindrances delay too long the essential preliminary of a laying up scheme, which is to find the money to make it effective.

The Freight Markets

Although a good volume of business has been concluded in the freight markets during the past week the easier tendency of rates continues, and has spread from the Eastern sections to the North American market. The Chartering Committee secured tonnage at 20s. per quarter St. Lawrence/U.K. early in the week compared with last business at 21s. 3d., and towards the end were fixing September/October vessels at 18s. 9d. per quarter, a substantial fall. In the Far East rates from North China have also declined again, the *Epiros*, 8,000 tons d.w., for cargo having been fixed from North China to Antwerp or Rotterdam at 180s. f.i.o., a decline of 10s. on previous business. From the North Pacific vessels have been chartered to the U.K. for grain at 145s., a decline of 5s., and for lumber and generals at from 182s. 6d. to 177s. 6d. f.i.o., according to position. Australia continues quiet, the only fixture reported being the *Exmoor* at 135s. per ton, bulk wheat, to West Italy, a decline of 10s. on the last rate paid for this direction. Chartering for timber from the Baltic has been active, and rates are very firm. From Eastern Canada also the improved rates of 527s. 6d. per std. for d.b.b. and 460s. per fthm. props have been paid for July tonnage.

Time charter continues active, the motor vessels *Sherborne*, 8,900 tons d.w., 510,000 cu. ft. bale, 11 k. on 9½ tons, and *Cressington Court*, 10,200 tons d.w., 518,000 cu. ft. bale, 11 k. on 10 tons, having been fixed for Australian rounds at 57s. 6d. and 56s. respectively. The *Tulse Hill* (oil burner), 10,344 tons d.w., 464,000 cu. ft. bale, 10-10½ k. on 22/24 tons, has also been fixed for an Australian round at 52s. 6d. *Wembley Hill*, 10,250 tons d.w., 488,000 cu. ft. bale, 10-10½ k. on 22/24 tons oil, has been taken, delivery Marseilles, for the trip out to Indo-China at 55s., and a Greek Liberty similarly at 56s., delivery Rotterdam.

Italian Merchant Tonnage

The Italian merchant fleet at the beginning of April last amounted to a total of 2,881,000 tons gross, compared to 1,853,000 tons at the end of 1947 and 3,400,000 tons in 1938. Passenger and cargo liners accounted for 473,000 tons in April last, compared with 297,000 tons in 1947; dry-cargo vessels for 1,749,000 tons (1,187,000); tankers for 614,000 tons (354,000); and fishing vessels for 45,000 tons (15,000). The tonnage of cargo and passenger liners is now only half what it was in 1938, while dry-cargo tonnage is 11 per cent greater. More than half of this tonnage consists of war-surplus vessels purchased from the United States since the war.

May Freight Index

The Chamber of Shipping index number of tramp shipping freights for May 1951 is 203.8 (1948 = 100). The index thus reaches a new high level after a slight fall last month. The new figure compares with 176.8 for April 1951, and with 71.4 for May 1950. The index number is based on tramp fixtures in sterling reported during the month.

WORLD PETROLEUM CONGRESS

PROBLEMS OF TANKER DESIGN : DIESEL ENGINE DEVELOPMENTS

By a Special Correspondent

THE INCREASE in size, speed and pumping capacity of tankers in recent years is beginning to lead to a controversy between owners and harbour authorities. This conflict of interests became apparent during the discussions in the transport section of the Third World Petroleum Congress at Scheveningen, Holland, when a number of papers on tanker design and turnround were commented on by several delegates, the majority of whom were connected with large ports in an official capacity. The trend towards higher loading and discharging speeds, these speakers said, is not only one of costs, but also presents a social problem that of recreation for the crews, especially when these crews consider a certain port as their home port.

In Britain, it was commented, discharging times have been reduced from 4½ days in 1939 to 1½ days in post-war years. This has been made possible by the extension of harbour facilities at the cost of substantial expenditure. If, however, tanker companies continue to build still larger ships, the time may come when "somebody is going to have a headache". Already there are rumours of future discharging capacities of 4,000 tons per hour as compared with 1,600 tons per hour at present and 700 tons in the recent past.

Time in Port

Mr. R. L. Brown, naval architect of the Marine Research and Development Department of the Anglo-Saxon Petroleum Co., Ltd., co-author (with Mr. John Lamb, manager of the same department) of a paper on "The size and speed of tankers and recent improvements in construction", replied that owners and harbour authorities should cooperate in this matter. They will have to find an organisation to draw up separate regions for large and small tankers. He admitted that times in port may become so short that conflicts with the crews will occur. Mr. N. Th. Koomans, manager of the port of Rotterdam, asked to what extent owners were profiting from the advantages of larger ships, while the ports have to bear increased costs. Answering him, M. Deschênes said that the advantage of larger ships had been proved in France. Higher port duties, which Mr. Koomans suggested, were not necessary and payment per ton should be continued.

In view of the constantly increasing uses of petroleum and its products, it is safe to say that tankers will form a larger proportion of the world's future shipbuilding than hitherto, particularly as the average useful life of an oil tanker is considerably less than that of a dry cargo carrier, said Messrs. Lamb and Brown in their paper. The increase in size is reducing the trading flexibility and because of the greater depth required the largest tankers now building will be able to use only a small number of recognised oil ports. They are becoming "liners" in the strict sense of the word. Increase in deadweight reduces the cost of transport, which is shown by the fact that calculated operating costs on the Curacao/U.K./Curacao route at a speed of 11½ knots compare as 100, 66 and 52 for vessels of 10,000, 20,000 and 30,000 tons respectively. Increase in size permits higher speeds. Economical average speeds for ships of 10,000, 20,000 and 30,000 tons d.w. are about 11½, 13½ and 15 knots, and this makes the comparison 100, 64 and 49. Any speed above or below the economical speed reduces the profit earning capacity. It was sometimes suggested that the speed of contemplated tankers and other ships should be determined by the anticipated requirements of a possible future war. Sufficient is known, however, about submarine developments to make the suggestion to give merchant ships a greater speed than that of submarines unworthy of a moment's consideration. The only certain thing, whether ships sail in convoy or independently, is that the quicker they are able to complete a voyage the less likely they are to be attacked. There is no practicable speed which will ensure immunity in a next war. For the same dimensions a slow ship will carry more per voyage than a relatively fast ship. Within a certain range of speed the fast ship will, in a year, transport a greater quantity of cargo than the slow ship, but the extra freight earned would be more than offset by the cost of additional bunkers. Comparing the fuel consumptions and quantities of cargo carried by two ships of the same overall dimensions, one having a speed of 13 knots and the other of 16 knots, one finds that on the U.K.-Curacao route the slow ship in one year consumes 13,850 tons of fuel and carries 182,500 tons, whereas the faster ship consumes 20,500 tons and carries 186,000 tons.

The practice of operating machinery, particularly diesel engines, at from 5 to 10 per cent below the rated power has been proved by experience to be advisable, but a sound case cannot be advanced for installing an engine of greater reserve power. There is no reason why the engine cannot be operated at full rated power for short periods on occasions when a little extra speed is required to catch a tide.

The great increase in the quantity and variety of petroleum products has resulted in the need for improved design and construction. This requires highly specialised knowledge, and the increase in the costs of operation has caused owners to give so much attention to the economics of sea transport that the tanker owning companies now employ their own specialists for design, etc. Not only deadweight, average service speed and cargo handling equipment, but also the subdivision of cargo spaces, prevention of cargo admixture or contamination, safe handling of cargo, the disposal of dangerous gases and the layout of the cargo pumping arrangement must be given careful consideration if the maximum flexibility in loading, transporting and discharging cargoes is to be achieved. The merits of having a completely reliable structure cannot be over-emphasised and this is particularly so at the present time when cargoes are often made up of several different grades of petroleum products.

Strength Standards

The standard of strength at present adopted by classification societies is the result of observations made over many years and represents what is considered necessary to provide a reasonable margin of safety. Tankers in the region of 30,000 tons d.w. are, however, a comparatively recent innovation, and the extent to which the present recognised relationship of length and breadth to depth can be exceeded with safety and economy in maintenance must remain a matter of opinion until more experience with such ships in service has been gained. While the present trend is towards larger and faster tankers, there will always be work for smaller tankers, since there are a great many oil ports throughout the world which will for many years to come require to be served by ships drawing between 15 and 30 ft., the latter figure being the draught of a ship of about 18,000 tons d.w.

Welding has proved to have many advantages over riveting and if a seam is machine-welded, a practice that is being increasingly adopted, the number of man-hours for a seam of 100 ft. between plates one inch thick is only 39, compared with 75½ for a riveted seam. The great weight advantage in making large parts such as bedplates, frames and gearcases of marine

engines of welded steel sections in place of iron or steel castings is not yet generally recognised, but the day is not far distant when large castings for such purposes will be entirely superseded. Moreover, the loss in time and money, in case a defective casting is not discovered until the machining stage is well advanced, is eliminated and repairs are more easily effected. Experience with structures in service with the Shell group has proved that the rigidity of welded sections is not less than that of castings.

Corrosion

Corrosion was extensively discussed. It is not really caused by the petroleum products but rather by the water which in most cases is always present in certain quantities. Four different systems to prevent or palliate these troubles were discussed, including special organic and inorganic corrosion preventers which may be added to the petroleum products, electric protection systems, by external current or so-called sacrificial metals. Mr. G. D. Harden (Shell Oil Co., New York) described a method for corrosion control consisting of galvanic protecion of ballast tanks, using magnesium anodes, and chemical inhibition of non-ballast tanks using a special solution of an inexpensive but effective corrosion inhibitor. The estimated operating cost of this method involves about $3,000 a year for replacement of anodes and $8,000 a year for the inhibiting solution for a T2 tanker. This would mean a saving of $250,000 to $300,000 for a T2 tanker during a 20 years' life.

In a paper on the stability and compatibility of fuel oils Mr. C. W. G. Martin, of the Shell Petroleum Co., Ltd., held that the claims for some advertised combustion improvers, sludge removers, etc., are so fantastic that they can be dismissed as not warranting serious scientific or commercial consideration. It is undoubtedly the existence of widely advertised additives which has helped to focus attention on the sludge problem. It appears to emerge that, in the marine world at least, the so-called stability problem is never due to dry sludge, but that it is always the association with water which presents difficulty. In other words, the emphasis of current studies is shifted rather from instability as such to the concurrence of instability with emulsification. It is reasonable to forecast that the problem is an evanescent one. The real answer, it would seem, is not in additives but in the development of refinery techniques on lines already under investigation to provide products which are more resistant to the unstabilising effects of heat, water contamination and the like.

Future of the Gas Turbine

The congress, which heard over 2,500 delegates from 41 countries discuss a wide range of technical and theoretical subjects in a most harmonious and friendly atmosphere, also paid attention to aspects that concern the shipping industry as well as other users of oil products. One of these is the future use of gas turbines. Professor J. J. Broeze, director of the Royal Dutch/Shell Laboratory at Delft, Holland, foresaw increasing importance for the diesel engine, particularly after the wear problem has been better solved. This would open wide perspectives for engine development and smaller dimensions. The wear factor excepted, the small engine gains on all counts: its development can be more thorough; its manufacture more economical. In ships its low deadweight is in its favour. If the total power requirement is too big for one, take more of them and find reliability in numbers.

Since sticking of piston rings was found to be related not only to piston temperature and cleanliness of combustion, but also to sulphur in the fuel, the attacks on this trouble and on wear converged and led to decisive results that, as Professor Broeze announced, are now there for ready application. Hence one of the main glimpses of the future is the emergence of the heavy oil engine from its restraint. Henceforth, it may be developed further for compact, enduring power and its development is no longer hindered by any other limit than the endurance of its materials. It may burn any reasonable petroleum fuel and if an attempt is made to increase its output by supercharging, this only improves its ability to digest the heavier varieties, as Ricardo has shown recently. The freeing of its bonds will enable it to be made in ever more compact form and for marine propulsion the multiple-engine plant with gearing will be the most classical solution with a direct appeal. But the freedom to reach for higher specific power will attain its climax in the marriage between piston engine and turbine, a combination already well known for several years, but which not only shows new variants but attains new records in efficiency and durability every moment.

Implications of Supercharging

The diesel engine, relatively heavy for a given size owing to its high pressures, is much helped by performing the first part of compression of light atmospheric air to somewhat higher density outside its cylinders. In simple installations this may be done to some extent by means of belt-driven blowers. If one goes further, to intake pressures of 2 to 4 atmospheres and possibly more, it becomes of interest to harness the exhaust energy that so far has gone unused, and thereby turn a loss into a gain. Hence the phenomenal efficiency of the turbo-supercharged engine, reaching now up to 45 per cent. From the same thermodynamical reasoning stems also the Pescara cycle, where the pre-compression is driven so far that the engine uses up all its power in driving the supercharging and the only power available comes from the—now detached—turbine. Whereas this system has not yet attained the same high efficiency, it excels in providing a high-speed flexible drive, so that one may see in it a strong competitor to diesel-electric or diesel-hydraulic installations, both as regards flexibility and the ability to gear many units to one central power take-off, such as a ship's propeller shaft. Smoothness of running will be ensured by the high densities of the air in the supercharged engines, as well as by the greatly improved control over injection, while the same factors will also provide swift and complete combustion. Thus, power plants of reduced size, built up from well-developed units, can cover power needs from a few tenths of a h.p. up to tens of thousands of kilowatts with unsurpassed economy and unheard-of reliability and longevity.

Messrs. E. L. Bass, I. Lubbock and C. G. Williams of the Shell Petroleum Co. and the Shell Refining and Marketing Co., also spoke of ultimate success in the gas turbine field. Marine and industrial gas turbines are not yet universally capable of burning satisfactorily the residual type of fuel oil. While this is not important in some applications, there are others where, for economic reasons, it is most desirable. Progress is being made in an understanding of deposition and the corrosion sometimes associated with it, and there is good reason to believe that, in time, solutions to these problems will be found. At first sight, the authors said, it appears strange that only 15 or 20 marine plants developing little over 50,000 h.p. have been contemplated, but considering the expense and risk of breakdown at sea, the reason for a conservative outlook is both obvious and justifiable. It is thus fairly certain that more marine orders will be placed as soon as adequate reliability has been demonstrated either ashore or in service at sea.

ORDERS for nearly $8,000,000 (about £2,800,000) worth of turbine units and electrical equipment for the new "Mariner" cargo ships ordered by the U.S. Maritime Administration have been placed with the Westinghouse Electric Corporation, of Pittsburgh. The company will supply equipment of various types for 15 of the 25 ships of this class now being built.

COAL AND OIL

RECOVERY IN INDONESIA

THE UNCERTAINTIES now affecting oil production in Persia, whence comes a considerable volume of supplies for Eastern countries, lend heightened importance to Indonesia as the most important—and the oldest—source of oil in the Far East. With oilfields and refineries nearing recovery from the double or treble destructions of the war period, crude oil production is now running close to the prewar level of 8 million metric tons a year, while total refinery capacity in Indonesia is now above what it was before the war. It now totals about 170,000 barrels daily (8,600,000 tons a year) and is therefore somewhat above the current level of crude oil production. Last year about 1½ million tons of imported crude, mainly from the Seria field in North Borneo but also from the Klamono field in New Guinea, were treated in Indonesian refineries. B.P.M.'s (Royal Dutch-Shell) refinery plant at Balikpapan in Indonesian Borneo was completely destroyed, but will soon come near its prewar capacity when the reconstruction programme is completed (in early 1952, when capacity will reach about 43,000 b/d.) The country's two other main refineries which are in Southern Sumatra—the adjoining plants of Standard-Vacuum at Sunggei Gerong and B.P.M. at Pladju—suffered some war damage but have been repaired and expanded to an annual capacity of 64,000 and 74,000 barrels daily respectively. Although exploration work is being actively continued in this area, there are no signs at present of any great possibilities for expansion: as indicated in this column last week, these must come from the Middle East. Nevertheless, the fact that this oilfield has been more or less fully restored to its prewar state is not without its importance at the present time.

Tanker Rates Rising

ALTHOUGH the actual amount of business concluded has been small, tanker spot rates are beginning to climb again after their recent fall. Lambert Brothers, Ltd., report that while London charterers have not shown any pressure to take tonnage, there has been increased demand from French and Continental charterers, so there has been a rapid increase in rates paid, although the actual business concluded is not large. Owners generally are inclined to hold off from fixing, and there seems no doubt that there will be some further rise in rates. In a similar vein, Howard Houlder & Partners, Ltd., report that only a few fixtures have been concluded, as the majority of owners are still adopting a waiting policy in anticipation of higher freights, even over the balance of the summer months. This applies particularly in the case of consecutive-voyage inquiry, which has very little attraction for owners at present. Long period time charter is still quoting for up to end 1953 delivery, and there is a report, so far unconfirmed, that a 1954 new-building has been fixed for seven years at 21s. 6d. John I. Jacobs & Co., Ltd., state that on timecharter basis only one fixture of a handy vessel is reported, but American charterers are continually sounding the market for suitable tonnage and there is no doubt that business can be done for their account with delivery 1952 or later. The most recent indication is the dollar equivalent of 23s. 6d. on d.w. for five years with 1952 delivery. Rates in the United States coastwise market are holding steady at U.S.M.C. plus 25-30 per cent for clean oils. There is a shortage of early black oil carriers, with a consequent restriction of business.

Shorter Items

FOR the first time since imports of coal began last year, a nil return for the week's total was reported by the Ministry of Fuel and Power for the week ending on June 9. The report of the National Coal Board revealed that the amount purchased in America had been 1,200,000 tons, and as some 1,116,000 tons have now entered the country it is evident that the programme is drawing to a close.

DURING April, coal shipments from the Hartlepools amounted to 167,485 tons, making a total of 673,811 tons for the first four months of the year. In the first four months of 1938, shipments were 967,441 tons.

CHAMBER OF SHIPPING

Coasting Liner Section

THE annual meeting of the Coasting Liner Section of the Chamber of Shipping of the United Kingdom was held on June 14. Mr. M. Arnet Robinson, the retiring chairman, in his report of the year's work, said that the problems of coastwise shipping had received a sympathetic hearing by the Coastal Shipping Advisory Committee. There was an appreciation of the importance of coastwise shipping, and a desire on the part of the British Transport Commission's representatives on that Committee to ensure that the operation of the nationalised undertakings did not damage coastwise shipping.

The Freight Equalisation Scheme came to an end in June 1950, since when adjustments in railway rates had gone some way towards restoring the competitive equilibrium between coastal liner services and the railways. Particular importance was attached by coastal shipowners to the lower level of surcharges for coasting shipping introduced by the National Dock Labour Board in July 1950. Handling costs, and the excessive time ships spent in port as the result of slow work, constituted a heavy drain on shipowners' resources, and made the matter one of urgency.

Mr. J. R. Cowper (Dundee, Perth & London Shipping Co., Ltd.) was elected chairman, and Mr. J. N. Burrell (Tyne-Tees Steam Shipping Co., Ltd.) vice-chairman.

Japanese Trans-Pacific Services Restored

Japanese shipowners have been given permission to operate regular services on the trade route between Japan and North America. Four Japanese lines have been authorised to provide one sailing a month each. Application has also been made for a Japanese liner service providing one sailing a month to U.S. Pacific North West ports, and this application is now being considered. The present authorisation is conditional upon operation in compliance with the accepted practice on these trade routes. The companies involved are the NYK Line, run by the Nippon Yusen Kaisha and the Yamashita Steamship Co.; the OSK Line, run by the Osaka Shosen Kaisha and the New Japan Steamship Co.; the Kokusai Line, run by the Iino Marine Transport Co., the Toho Line, the Nissan Steamship Co. and the Mitsubishi Steamship Co.; and the Mitsui Line.

OFFICIAL NOTICES

New Company

HARCOURT CAMPBELL SHIPPING, LTD.—Registered May 31. Nominal capital: £400 in 1s. shares. Directors: P. J. B. Reynolds, 25 Dover Street, London, W.1 (chairman); C. A. R. Campbell, 601 Beatty House, Dolphin Square, London, S.W.1; C. Harcourt Smith, 22 Montagu Mews South, London, W.1.

[Information from *Jordan's Daily Register of New Companies*]

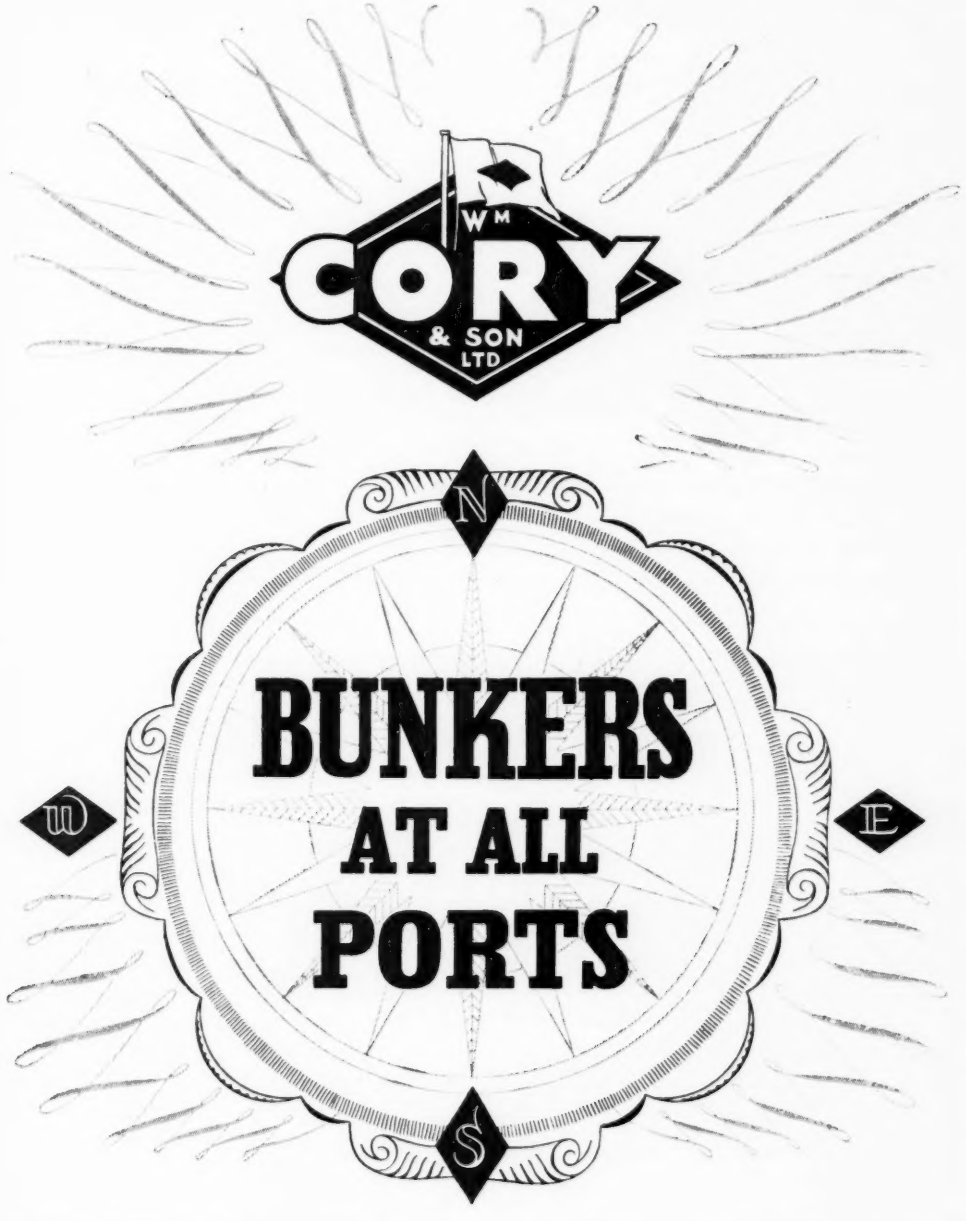
Change of Name

NORDENFJELDSKE STEAMSHIP SERVICES, LTD., 5 Fenchurch Street, London, E.C.3.—Name changed to Nor-Med Lines, Ltd., on June 1.

Increases of Capital

ALEXANDRA TOWING CO., LTD., 6 Covent Garden, Liverpool. —Increased by £50,000, in £1 ordinary shares, beyond the registered capital of £50,000.

CHARLES HOWSON & CO., LTD., ship repairers and builders, etc., 9/11 Sandhills Lane, Liverpool 5.—Increased by £170,000, in £10 ordinary shares, beyond the registered capital of £30,000. Cunard Steam-Ship Co., Ltd., William Hamilton & Co., Ltd., and David Rowan & Co., Ltd., each hold large blocks of shares.



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TELEGRAMS:
EVERASHIP FEN, LONDON.

GREENHITHE OFFICE
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HARLAND & WOLFF, LIMITED

IMPORTANCE OF STRONG FINANCIAL POSITION

Sir Frederick E. Rebbeck on the Substantial Order Book

THE 66th annual general meeting of Harland & Wolff, Ltd., was held on June 14 at the registered offices of the company, Queen's Island, Belfast. Sir Frederick E. Rebbeck, D.Sc., D.L., chairman and managing director, presided. The secretary (Mr. F. V. Spark, A.C.A.) read the notice convening the meeting and the report of the auditors.

The Chairman said: As the statement of accounts and the directors' report have already been in your hands for some time, I propose, with your permission, to take them as read. (Agreed.)

As you will see from the figures before you, the consolidated profit on trading for the year is approximately the same as for the previous year, but as the amount brought to credit in respect of settlement on contracts completed in previous years is about £175,000 higher, the net profit after taxation is £98,554 higher at £778,015.

During the year considerable progress has been made in connection with the settlement of our liabilities for taxation, and it has been found possible for the group to release a sum of £808,920 which had been provided in previous years.

Since the introduction of initial allowances the company's liability to taxation has been reduced by about £223,140 to the end of December 1950, but as this is only a temporary benefit which has to be paid for in due course it has been considered advisable to set aside this sum until it will be required to offset the increased taxation which in time will fall to be paid.

In continuation of the policy followed in recent years, and to implement an undertaking given to the older employees at the commencement of the Staff Pension Scheme in 1943, we have set aside the sum of £108,926, practically the whole of which was to augment the pensions of a number of senior executives other than directors.

Prudent Financial Policy

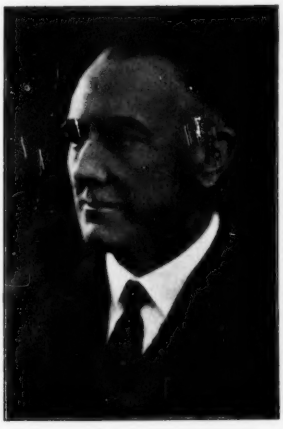
With the rise in prices that has taken place over recent years and is likely to continue, it is of vital importance to maintain a strong financial position and be able to finance the increasing business of the company. It has, therefore, been considered wise to retain as large a proportion of the profits as possible and, after making the same dividend payment on the ordinary shares that we have made for several years past, the remainder of the profits has been retained in the business.

Once again the output from the company's works was the largest in the United Kingdom, sixteen vessels being launched last year with a total gross tonnage of over 158,000. The vessels launched comprise a passenger and cargo vessel, a refrigerated cargo vessel, a whale factory ship and several oil tankers. This is the eleventh successive year in which the vessels launched from the company's yards have exceeded 100,000 gross tons.

Substantial Contracts Secured

As stated in the report of the directors, orders were very scarce in the early part of 1950, but later in the year the position changed, shipowners were placing orders much more freely and your company has secured further substantial contracts.

Many orders have been received for propelling engines to be installed in hulls building by other shipbuilders, and also for engines or land installations both at home and abroad. In addition, orders have been received for compressor sets which we are building under licence from the Cooper Bessemer Corporation of Mount Vernon, Ohio, U.S.A., while at our Scotstoun works we are continuing in association with The English Electric Company with a large programme of work in connection with the supply of water turbines for the Scottish hydro-electric scheme and other schemes of a similar nature which are being carried out abroad.



Sir Frederick E. Rebbeck, chairman of Harland & Wolff, Ltd.

Our Electrical Manufacturing Division is booked to capacity with work both for our own ships and for other outside contracts.

Steel Construction Division Fully Occupied

The Steel Construction Division has again been fully occupied during the year and there is every prospect that it will continue to be fully employed for a considerable time to come. It is hoped that the position with regard to steel supplies, to which I will refer presently, will not unduly curtail our activities in that division.

The reconditioning of large passenger liners which was necessitated by their war service has now been completed and in consequence our repair works at Liverpool, London and Southampton were not as fully employed as in 1949; nevertheless they have carried out a considerable volume of work.

In addition to Naval new construction, the work now in hand covers a large programme of merchant shipbuilding comprising large passenger vessels, cargo vessels, a cross-channel vessel and tankers for both British and foreign owners, including some of the largest tankers on order in the United Kingdom. The construction of these vessels will keep the shipyards and engineering shops fully employed for some time to come.

The company's property and plant have been well maintained during the year.

Material Supplies

A year ago it was possible to record that the supply position of essential materials used in shipbuilding was helping to expedite the construction of ships, but the position has now changed and for various reasons it is becoming increasingly difficult to obtain deliveries at the appropriate times of certain essential materials. The most important of all these essential materials is steel and, as recently announced in the Press, owing to shortages of scrap and iron ore shipbuilders fear they may not be able to count on obtaining their full steel requirements.

On behalf of the Board it gives me great pleasure to thank the employees of the company for the service they have rendered during the year.

The Report and Accounts were adopted; the

(*Continued at foot of next page*)

Union Insurance Soc. of Canton

Assets Exceed £12,235,000

THE annual meeting of the Union Insurance Society of Canton, Ltd., was held on May 24 at Hong Kong, Mr. J. F. Macgregor (the chairman) presiding. The following are extracts from the report and accounts and the chairman's circulated statement:—

Marine.—The net premiums for the year amounted to £2,562,693. After providing £80,000 for taxation and releasing £200,000 to profit and loss account, the marine fund stands at £3,265,192.

Fire.—The net premiums for the year amounted to £2,092,899; £99,552 has been transferred to profit and loss account. The fire fund stands at £1,141,805.

Accident and General.—The net premiums for the year amounted to £875,570: £7,295 has been transferred to profit and loss account. The accident and general fund stands at £450,228.

Profit and Loss Account:—Interest and dividends amounted to £269,216 and transfers from underwriting accounts to £306,847. After charging taxation paid and other outgoings, and allowing for the minority interests of the outside shareholders of the subsidiary companies, the profit for the year appertaining to the society is £370,775. After deducting profit retained in subsidiary companies, £73,867, there remains a distributable profit of £296,908. To this has been added the balance brought forward from the previous year, £316,048. After providing for the dividend and transferring to general reserve £40,000 of the £100,000 released from provision for contingencies account (the balance of £60,000 being retained in the subsidiary companies) and transferring £4,000 to provision for staff pensions, there remains a balance of £332,706 to be carried forward.

Consolidated Balance Sheet.—Total assets amount to £12,237,327.

Chairman's Statement

The clouds of war again made their appearance during the past year, and while the outbreak of hostilities in Korea last June has tended to focus attention on the Far East, repercussions from the rearmament programmes are progressively being felt in all quarters of the globe.

Unsettled conditions in the Federation of Malaya and in Indonesia unfortunately show no discernible improvement, and although this factor naturally limits the development we would seek in our business in those countries in more peaceful circumstances, the statement of accounts and balance sheet for 1950 reflect satisfactory progress in our overall worldwide operations.

A marked feature affecting our cargo marine business, especially in the latter part of 1950, was the increase in valuation of goods of all kinds and the consequent heavier cargo commitments in individual vessels, which we were and are still called upon to cover.

The marine and fire revenue accounts display good results and the fire net premium income, for the first time in our history, exceeds £2,000,000. The strength of the fire fund is also notable at over £1,000,000.

The accident and general revenue account, though profitable, shows a less favourable result than usual. This is mainly attributable to our experience shared with most insurance companies writing motor car business in Australia where unusually high awards have been made by the courts to injured third parties. Remedial steps now being taken in that territory are expected to improve the trend of this particular class of business during the current year. An additional factor having a bearing on the result shown in this account is the considerable advance in premium which calls for a corresponding increase in the amount retained in the accident and general fund for unexpired risks.

Turning to the balance sheet, shareholders will observe that the general reserve in the society's consolidated balance sheet now amounts to £1,000,000.

The report and accounts were adopted.

SHIPPING LAID UP IN U.K. PORTS

Lowest Figure Since 1946

The quarterly statement, prepared by the Chamber of Shipping, of the number and gross tonnage of ships laid up at ports in Great Britain and Ireland on April 1, 1951, is given below, together with the figures for previous quarters. The second table shows the number and gross tonnage of those ships which were awaiting or undergoing repair. It will be observed that the bulk of the laid-up tonnage again consisted of vessels awaiting or undergoing repair; that the figure for British tonnage (610,574 tons) was the lowest quarterly figure since collection of these figures was resumed in 1946; and that the British tonnage laid up for reasons other than repair had fallen to 56,496 tons gross. The U.K. tonnage withdrawn from service at April 1, 1951, for reasons other than repair was less than one-third of one per cent of the total U.K. tonnage.

TOTAL LAID UP

	British		Foreign		Total	
	No.	Tons gross	No.	Tons gross	No.	Tons gross
April 1, 1950	221	964,830	12	42,313	233	1,007,143
July 1, 1950	199	973,112	8	37,401	207	1,010,513
October 1, 1950	156	639,163	8	51,084	164	690,247
January 1, 1951	144	685,344	9	39,927	153	725,271
April 1, 1951	149	610,574	14	34,180	163	644,754

AWAITING OR UNDERGOING REPAIR

	British		Foreign		Total	
	No.	Tons gross	No.	Tons gross	No.	Tons gross
April 1, 1950	156	767,757	9	30,040	165	797,797
July 1, 1950	155	825,303	4	21,304	159	846,607
October 1, 1950	116	516,438	6	50,122	122	566,560
January 1, 1951	108	603,319	6	30,857	114	634,176
April 1, 1951	120	554,078	13	33,534	133	587,612

The figures are based on returns furnished by the various dock and harbour authorities. The Admiralty figures of merchant shipping undergoing repair or reconversion in U.K. ports, given in the *Monthly Digest of Statistics*, include all vessels under repair, whether immobilised or not, and are therefore not comparable with the Chamber's figures.

Unemployment Among Colonial Seamen

The problem of unemployment among Colonial seamen in the main ports of the United Kingdom has for some time been the cause of concern, particularly on Merseyside. Last October, on representations from Mrs. E. M. Braddock, M.P., a meeting of representatives from the Shipping Federation, the National Union of Seamen, the Liverpool Advisory Committee of the Colonial Office, and the Government departments concerned, was held at the Ministry of Transport to examine and consider measures to relieve the problem. The initial examination revealed that 838 Colonial seamen were ashore, either unemployed or awaiting ships, of whom 200 were on the Liverpool register.

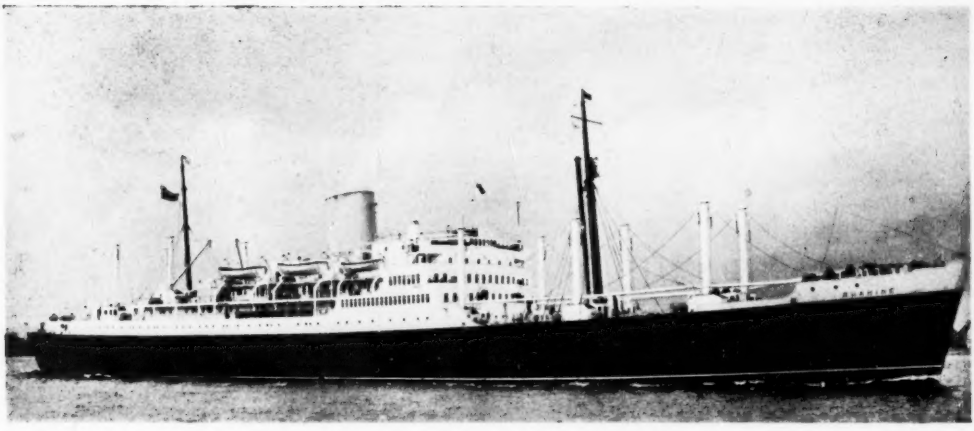
Concerted action by the Shipping Federation and the National Union of Seamen resulted in 128 Colonial firemen, selected as those least likely to find seagoing employment, being declared redundant and the Ministry of Labour took steps to find them alternative employment. Of these men 50 have now been placed or have found employment. Of the 57 nominated from Liverpool, so far 13 have been placed in or have found employment locally, and others have left the port in order to seek employment elsewhere; 24 remain to be dealt with. Prospects of employment for those remaining on the registers have now improved considerably, for the number of Colonial seamen in the country awaiting appointment to ships is now only 325, of whom 80 are in Liverpool. This is an encouraging figure which reflects both the efforts made to find these men employment in the Merchant Navy and increased employment generally in the industry. Efforts to place these Colonial seamen at sea and to place in shore employment the remainder of those declared redundant are continuing, and the position is being kept under review.

HARLAND & WOLFF, LTD.

(*Continued from previous page*)

proposed dividend was approved; the retiring directors, Mr. H. R. Humphreys, Mr. N. McCallum, Mr. C. C. Pounder, Mr. John Morrison, Mr. F. V. Spark and Dr. Denis Rebbeck were re-elected, and Messrs. Price, Waterhouse and Company were reappointed auditors and their remuneration was fixed.

The meeting terminated with a unanimous vote of thanks to the chair.



MOTOR LINER "RUAHINE"

PASSENGER AND CARGO LINER FOR NEW ZEALAND SHIPPING COMPANY

BUILT by John Brown & Co., Ltd., for the New Zealand Shipping Co., Ltd., the liner *Ruahine* recently completed successful trials and entered her owners' service. A twin-screw passenger and refrigerated cargo motor vessel, the *Ruahine* carries only one class of passenger. In this respect she follows the precedent inaugurated by the *Rangitoto* and *Rangitane*.

The principal dimensions of the ship are as follows:

Length overall	584 ft. 6in.
Length b.p.	550 ft.
Breadth moulded	75 ft.
Depth moulded to upper deck	48 ft. 6 in.
Draught, loaded	29 ft. 7 in.
Gross tonnage	17,850
Insulated cargo	443,000 cu. ft.
General cargo	145,000 cu. ft.
Number of passengers	257
Service speed	17 knots

The *Ruahine* is the third of the company's ships to bear the name; the previous *Ruahine*, built in 1909, was sold in 1949 and is still trading in Italian ownership as the *Auriga*. All the ships of the New Zealand Shipping Company have Maori names. "Ruahine" in Maori means "old woman."

In appearance the *Ruahine* maintains the well balanced and attractive look that is typical of the company's ships, with fore and main masts evenly spaced about a nicely placed funnel. In these days of powerful wireless transmitters the retention of the main mast is perhaps unnecessary, but it allows the house flag and ensign to be flown at sea in their traditional places at the mainmast head and gaff, and gives to a vessel a certain distinction that it is more difficult to achieve by other means.

The public rooms, with the exception of the dining saloon, are situated in a house on A deck. The forward end of this deck is protected by a screen fitted with large vertical sliding windows. The library and writing room runs aft along the starboard side of the house to the after stairway and entrance. The smoking room, extending for the full width of the house and with a large bay on each side, is fitted with a central bar.

The dancing space and verandah has large folding glazed screens fitted for the full width at the after end. These open on to an open deck space, where a flush cargo hatch increases the area for dancing and deck games. Facilities are provided for cinema shows, the operating being from the verandah projecting on to a screen erected immediately forward of the open air swimming pool. This pool is sunk flush with the deck, and dressing rooms are arranged in separate houses on each side.

The dining saloon, on D deck, extends for the full width of the vessel. A bar is provided within easy reach of the saloon, while a children's dining room, suitably furnished, is arranged forward of the main saloon.

The illumination throughout the passenger accommodation has been devised to enhance the colour scheme, and employs both tungsten and fluorescent lighting. All the designs for the fluorescent and main tungsten fittings were prepared by the architects, Messrs. Easton & Robertson, and executed by the General Electric Co., Ltd., using Osram lamps. The largest fitting is situated in the stairhall of A deck and is over 25 ft. in length. Probably the largest single decorative fluorescent fitting afloat, it incorporates over 178 ft. of gold and white cold-cathode tubing; light is emitted through 27 panels of obscured reeded glass. By way of contrast, a tungsten fitting is used to light the forward stairhall between C and B decks. Six feet in length and 4 ft. 6 in. wide, this fitting employs twenty-four 25-watt lamps set behind etched pattern obscured glass.

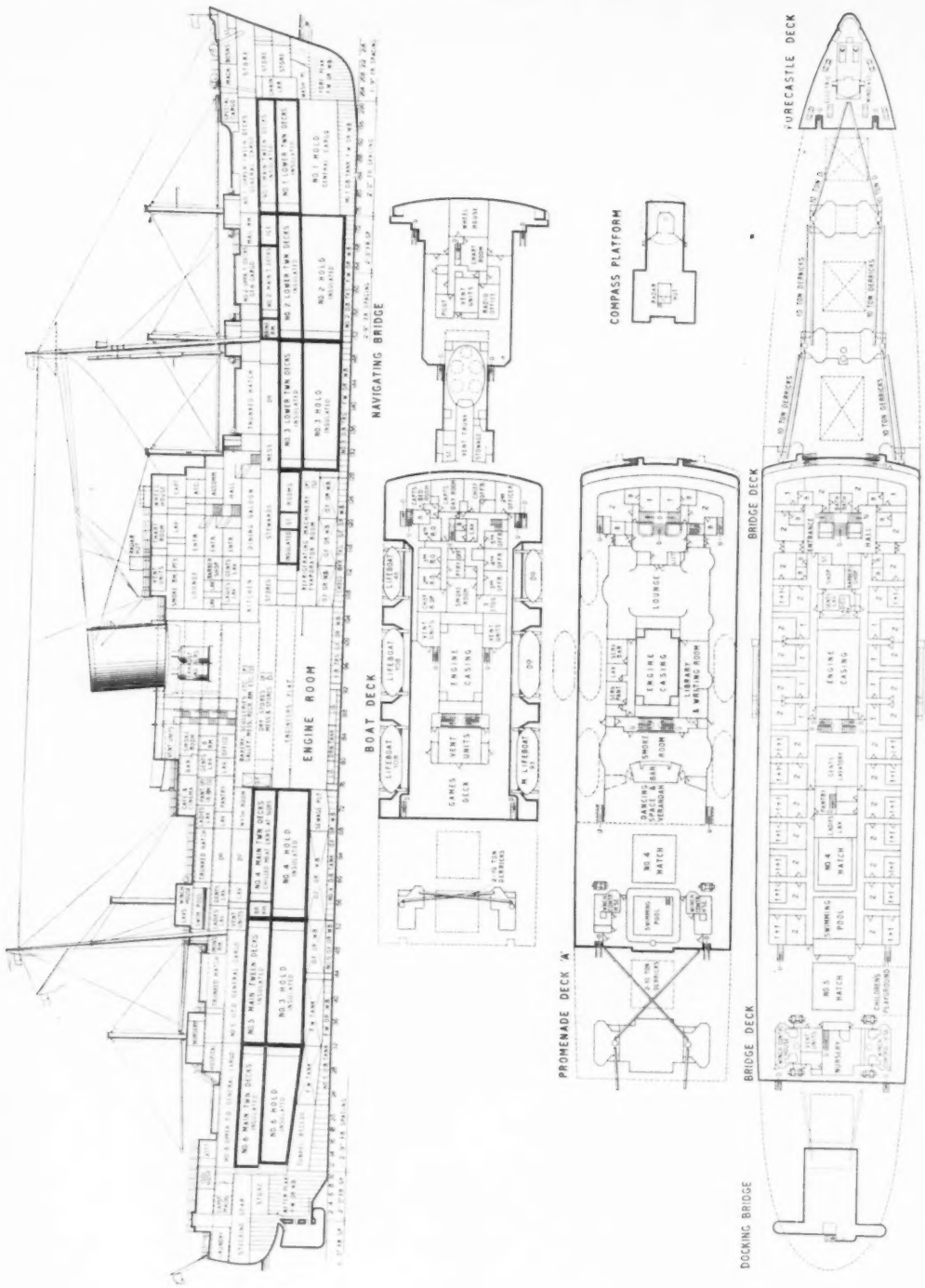
The passenger staterooms are mainly situated on B and C decks, and are arranged generally on the Bibby principle for one, two and three persons, with pullman berths for additional occupants when required. The furniture, in sycamore or in white ash with oak edgings, is matched by the delicate tints of peach colour paint used for the walls, while the shades of the curtains and upholstery and of the alabaster Korkoid floor covering give a pleasing finish. Hot and cold water is laid on to washbasins fitted in every cabin. Larger cabins have two basins fitted. Special staterooms with private bathrooms are arranged on B deck and A deck forward of the main stairway. All mattresses for passengers and crew were supplied by Vi-Spring Products, Ltd. The arrangement and fitting out of the officers' and crew's accommodation is of the usual high standard required by the owners.

Heating and Ventilation

All passenger accommodation and public rooms, officers' and crew's accommodation are heated and ventilated by Winsor pleno-units and fans. The air is finally delivered to these spaces by directional louvres and patent air diffusers situated on the trunks at ceiling level, and the temperature maintained by means of thermostats which operate a flap controlling the quantity of cold or warm air to be delivered. The isolation hospital, the general hospital, dispensary and surgeon's quarters are heated and ventilated, the air being delivered to the isolation hospital through trunks which are fitted with non-return valves automatically isolating these spaces should the fan motor be stopped for any reason.

Main galley and dependencies, crew's galley, stores and refrigerating machinery space are all supplied with air at atmospheric temperature. Winsor directional louvres are fitted in these spaces with the exception of the refrigerating machinery space which has been arranged with valve-controlled bellmouths at the point of delivery. All these compartments are exhausted by centrifugal fans. The installation was designed throughout by the Winsor Engineering Co., Ltd.

The main kitchen and its ancillary spaces are equipped with the latest type of electrical cooking equipment. Extensive use has been made of stainless steel throughout these


ENGINE ROOM
NO.1 HOLD
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NAVIGATING BRIDGE
BOAT DECK
GAMES DECK
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COMPASS PLATFORM
PROMENADE DECK
LOUNGE
LIBRARY & WAITING ROOM
SMOKE ROOM
DANCING & VERANDAH
NO.4 HATCH
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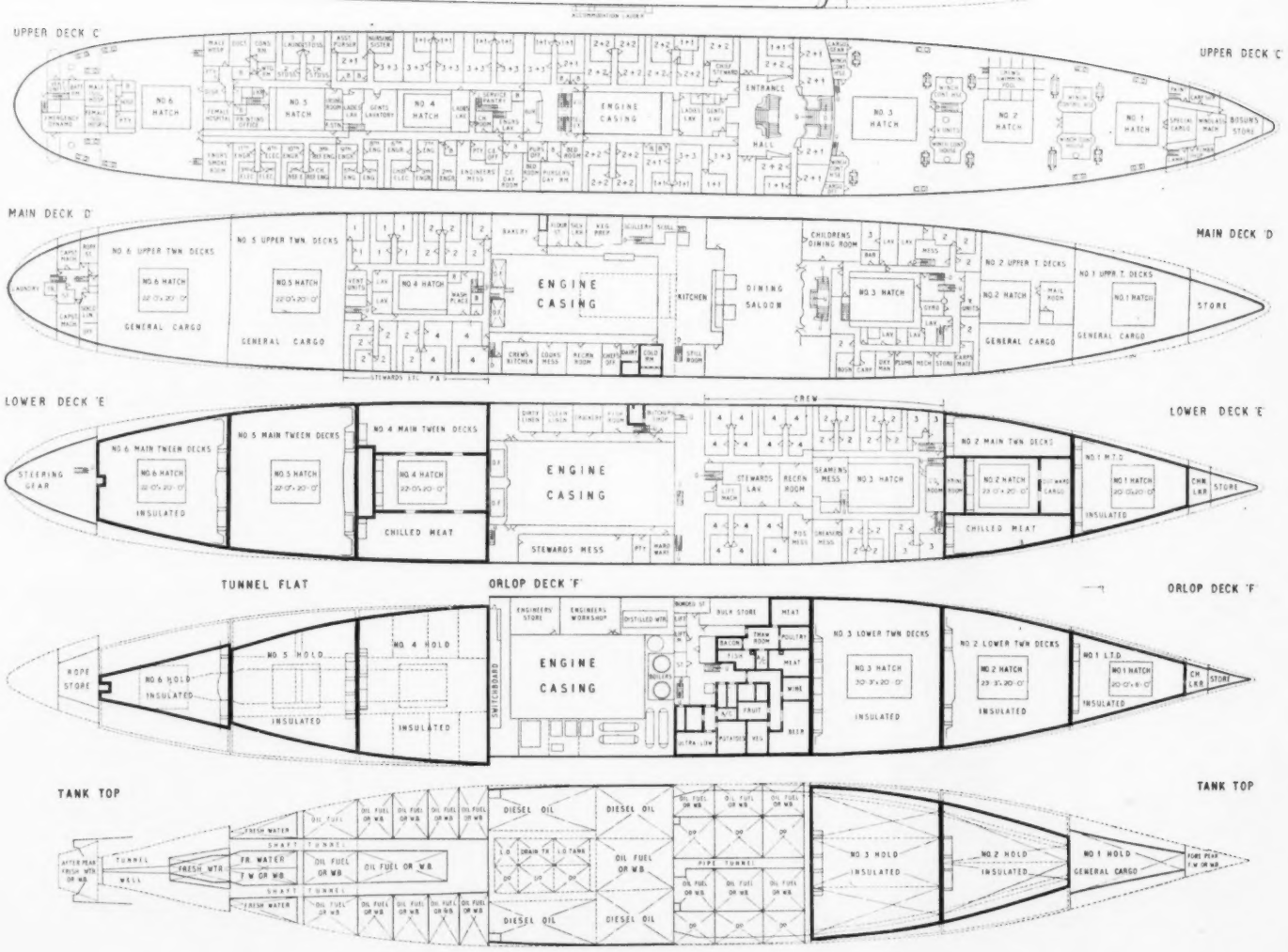
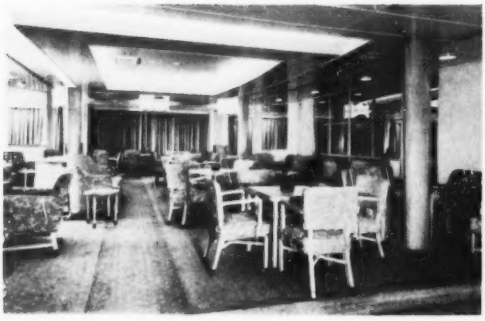
FORECASTLE DECK
NO.5 HATCH
NURSERY
CHILDREN'S PLAYGROUND
UPPER DECK



Profile and general arrangement of the twin-screw motor liner "Ruahine"



Lounge

First-class bar

spaces, and also in those allotted to the service of the ship's crew. Two sewage plants collect the discharges from W.Cs., washbasins, baths and showers. These plants are situated one forward and one aft, and each unit is comprised of two 4-in. diameter "Amphistoma" sewage pumps (one of which is a stand-by) and a collecting tank, fitted with automatic overboard discharge. These units are by Adams Hydraulics, Ltd.

All the holds with the exception of No. 1 hold, and all the lower and main tweendecks, are insulated for the carriage of refrigerated cargo, while the remaining spaces are fitted out for general cargo. The cargo is handled by an outfit of derricks working from derrick posts. A 50-tons derrick is also provided, working from the foremast. The cargo winches are electrically operated.

Two electrically driven warping capstans are fitted aft, and an electrically driven windlass on the fore deck. The windlass machinery is situated below deck. Capstans and windlass are by Clarke, Chapman & Co., Ltd.

The equipment for lifesaving includes five lifeboats fitted with hand propelling gear and one with a motor installed, while the davits are of the gravity type. Radio and radar equipment is supplied. Sperry equipment supplied includes a Mark XIV gyro compass, a steering repeater in the wheelhouse, and a bearing repeater on the monkey island.

Main Propelling Machinery

The main propelling machinery consists of two six-cylinder opposed-piston Brown-Doxford engines, each cylinder having a diameter of 725 mm. The combined piston stroke is 2,250 mm., the upper piston stroke being 950 mm. and the lower piston stroke 1,300 mm. These engines are designed to develop 14,200 b.h.p. at 115 r.p.m. with a mean indicated pressure in the cylinders of 85 lb. per sq. in. Scavenging air is supplied by three lever-driven double-acting pumps per engine, these being arranged so that the port engine has the pumps located in front of the three forward cylinders, while the pumps for the starboard engine are placed in front of the three after cylinders. The control positions are at the forward ends of the engines, which is the normal arrangement with six-cylinder engines of this type.

There are few deviations from normal practice in these engines, the usual welded framework having been adopted. One modification, however, from Doxford practice is that the side rods are bolted to the crossheads, instead of the normal screwing being employed. Also, swinging links have been employed for the cooling gear of the upper pistons, this being preferred to the use of flexible tubes. The crankshaft is built up in the normal way and a Bibby-Doxford detuner is fitted at the forward end. The scavenge air pumps are phased to ensure an even pressure in the entablature which forms the air receiver in communication with the scavenging parts.

Auxiliary Machinery

The fresh water used for cooling the main engine jackets and pistons is circulated by three Drysdale Centrex pumps, each with a capacity of 410 tons per hour, and driven by a 45/80-h.p. motor running at 1,200 to 1,500 r.p.m. The sea water for supplying the coolers is delivered by two Worthington-Simpson "Numarine" pumps, each with a capacity of 480 tons per hour, driven by 53-h.p. motors running at speeds between 1,400 and 1,700 r.p.m.

Lubricating oil for the bearings is supplied by three Drysdale Vertoil pumps, each capable of delivering 80 tons per hour against a pressure of 40 lb. per sq. in., each of these pumps being driven by a 23-h.p. motor at speeds between 1,000 and 1,300 r.p.m. The bilge pump, general service and sanitary pumps are all of the "Numarine" type, and each has a maximum capacity of 140 tons per hour. A "Numarine"-type ballast pump is also fitted, this pump being identical in all respects with the sea water circulating pumps. Two Weir 50-tons per hour fuel oil transfer pumps are installed, as well as two Drysdale "Upright" pumps which are employed in circulating fresh water through the generator diesels.

The engines have been arranged to run on heavy oil, and therefore the vessel is fitted with two De Laval purifiers

Four-berth cabin

Two-berth cabin

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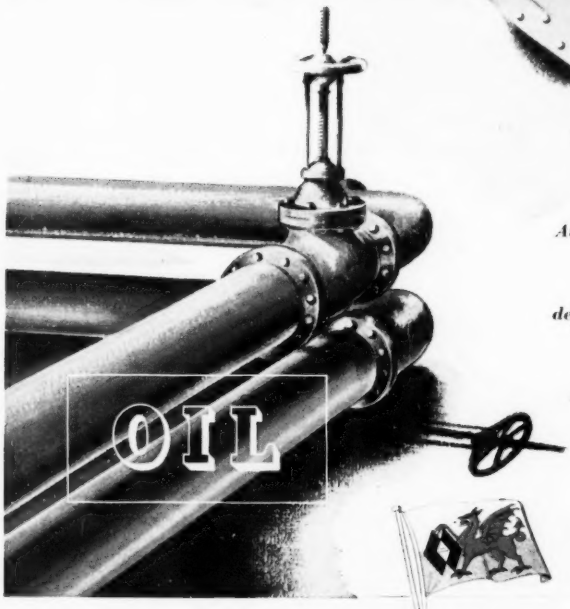

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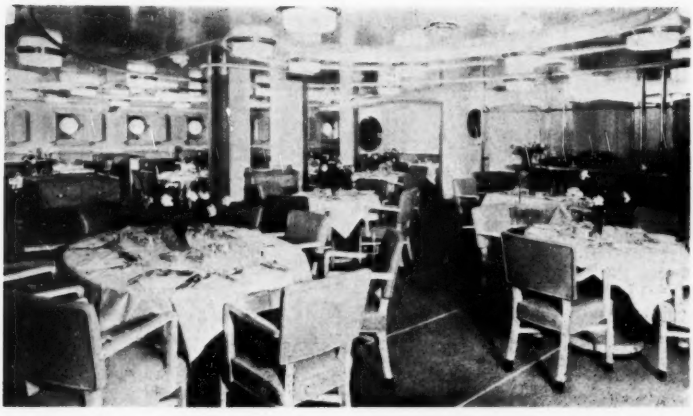


Dining saloon

and two clarifiers by the same makers, each of these machines being capable of handling 5/6 tons per hour when driven by a 7½ h.p. motor running at 1,450 r.p.m. A De Laval purifier is also supplied for the lubricating oil and is of the same size as those on fuel duties. Two Auto Klean strainers, each designed for 160 tons per hour, are fitted on the lubricating oil circuit and a further two of three tons per hour capacity are fitted on the lubricating oil supply to the thrust bearings. One Auto Klean strainer of three tons per hour capacity is installed in the fuel system.

The installation is protected by the usual system of alarms, these being of the Aspinall type. The power developed by the engines is measured by means of torsionmeters of the Siemens-Ford type, one of which is fitted on each shaft. Also included in the equipment is a Victor oily water separator with a capacity of 100 tons per hour. Ventilation in the engine room is provided by four Axia ventilating fans.

Steam is supplied by two Cochran oil-fired boilers and two exhaust gas boilers, each of which takes the gas from one main engine. Both oil-fired and exhaust gas boilers have a diameter of 7 ft. 6 in., the height being 18 ft. 6 in. The evaporation of each boiler is 4,500 lb. per hour at a working pressure of 120 lb. per sq. in. The oil-burning plant is of the Wallsend low-pressure type with electrically driven blowers.

Electrical Installation

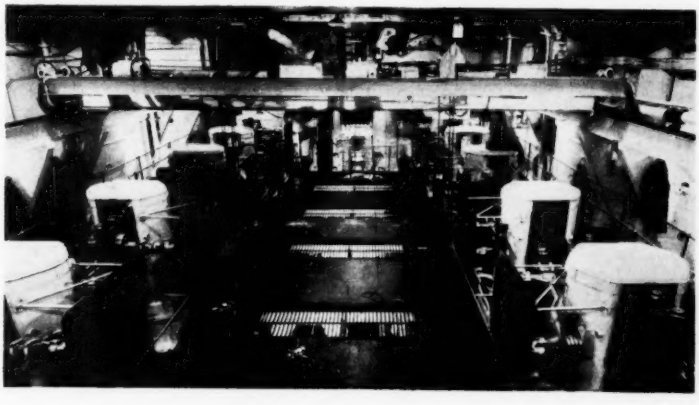
The generating plant consists of six 300-kW, 220-volt generators of Sunderland Forge's manufacture, each driven by a 450-b.h.p. British Polar diesel engine. An emergency generator of 75 kW is fitted, consisting of a dynamo by W. H. Allen, driven by a Ruston & Hornsby diesel engine. Two 15 kVA motor-driven alternators, with automatic voltage regulation, supplied by the General Electric Co., Ltd., are fitted for the supply of current to the system of cold cathode fluorescent lighting in public rooms and to miscellaneous alternating current supplies.

The electrical supply is controlled from a main D.C. switchboard, fitted at the after end of the engine room, and supplied by Watson & Dundas, Ltd., Glasgow. Adjacent to this board there is also fitted an automatic switchboard, consisting of grouped automatic starters for engineroom auxiliaries. This board is supplied by Brookhirst Switchgear, Ltd., Chester. Less important circuit motors on main switchboard and on auto starting panels are capable of being tripped in the event of the generator engine being overloaded, thus ensuring that important auxiliaries are kept running. In accordance with the latest International Convention requirements, the controls of ventilating fan motors are grouped at two fire stations, one forward and one aft.

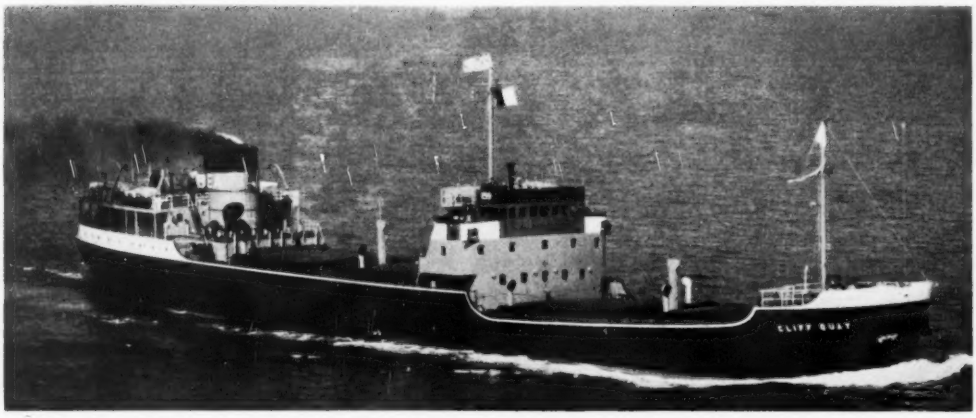
Steering motors are supplied through a mains failure cubicle, normally supplied from the main switchboard. On failure of the latter, the steering gear contactors are changed over to emergency supply, and the emergency generator starts up simultaneously.

Orient Liner "Oronsay"

In last week's SHIPPING WORLD the caption on page 532 referring to the first-class dining saloon on D deck in the Orient liner *Oronsay*, and that on page 534 referring to the first-class dining room, should both have referred to the first-class restaurant on B deck. The first-class lounge, referred to in the caption on page 534, is on B deck. It is of interest to note that the area of C deck, a picture of which was reproduced on page 533, is for use of the tourist-class passengers.



View of cylinder heads



THE COLLIER "W. J. H. WOOD"

ORDER FOR SIX SHIPS COMPLETED BY PICKERSGILL

WITH the delivery last month of the collier *W. J. H. Wood*, Wm. Pickersgill & Sons, Ltd., have completed a group of six sister ships which they have been building for the British Electricity Authority. These six colliers are intended, as is the rest of the Authority's collier fleet, for the supply of coal from the North-East Coast to power stations. They are self-trimming, and incorporate a number of features new to vessels of their type. They are built to the highest class of Lloyd's Register. The first of the class to be completed was the *Cliff Quay*, and the others, in order of completion, are the *Barford*, *Lord Citrine*, *Sir Archibald Page*, *Captain J. M. Donaldson*, and finally the *W. J. H. Wood*. The vessels are managed for the B.E.A. by Stephenson Clarke, Ltd.

The principal particulars of these ships are as follows:

Length o.a.	338 ft. 10½ in.
Length b.p.	320 ft.
Breadth, moulded	46 ft.
Depth, moulded	22 ft. 4 in.
Load draught	20 ft.
Displacement	6,390 tons
Deadweight	4,602 tons
Gross tonnage	3,356.70
Net tonnage	1,762.52
Coal capacity	207,725 cu. ft.
Stowage rate (self-trimmed)	46.0 cu. ft./ton
Block coefficient	.758
Service speed	10 knots

As may be seen from the accompanying drawings, these colliers are of the raised quarterdeck type, which is more or less standard in this class of vessel. The quarterdeck is raised by 5 ft. 6 in. There are four holds, divided into two pairs by a deep ballast tank under the bridge house. In addition to this tank, water ballast is carried in the fore and after peaks, and in double bottom and hopper tanks beneath the four holds. The quantity of ballast is sufficient to ensure a good draught for the voyage northwards, when the ships are light.

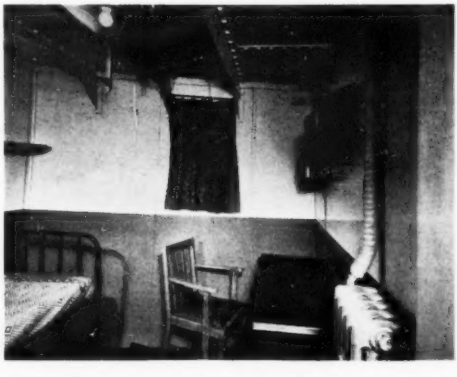
A moderate amount of welding has been employed in the construction. In the shell plating, butts are welded and seams riveted throughout. The seven watertight bulkheads are all welded: those separating Nos. 1 and 2, and Nos. 3 and 4 holds are of corrugated construction. Joggling of frames has been employed.

The four hatch openings are all 36 ft. wide: that of No. 1 hatch is 25 ft. long, and the remainder 30 ft. long. The hatch coamings are 4 ft. 6 in. high. They are fitted with MacGregor steel hatch covers of the latest single-pull pattern. The single wires from the hatch covers are led to posts between Nos. 1 and 2 and between Nos. 3 and 4 hatches. From these posts the leads go respectively forward and aft, the covers of the forward two hatches being operated by the windlass, and those of the after hatches by a special winch mounted on deck abreast the funnel. Cargoes are unloaded by shore grabs, the only derrick fitted being one of 2-tons capacity which is worked from the fore mast.

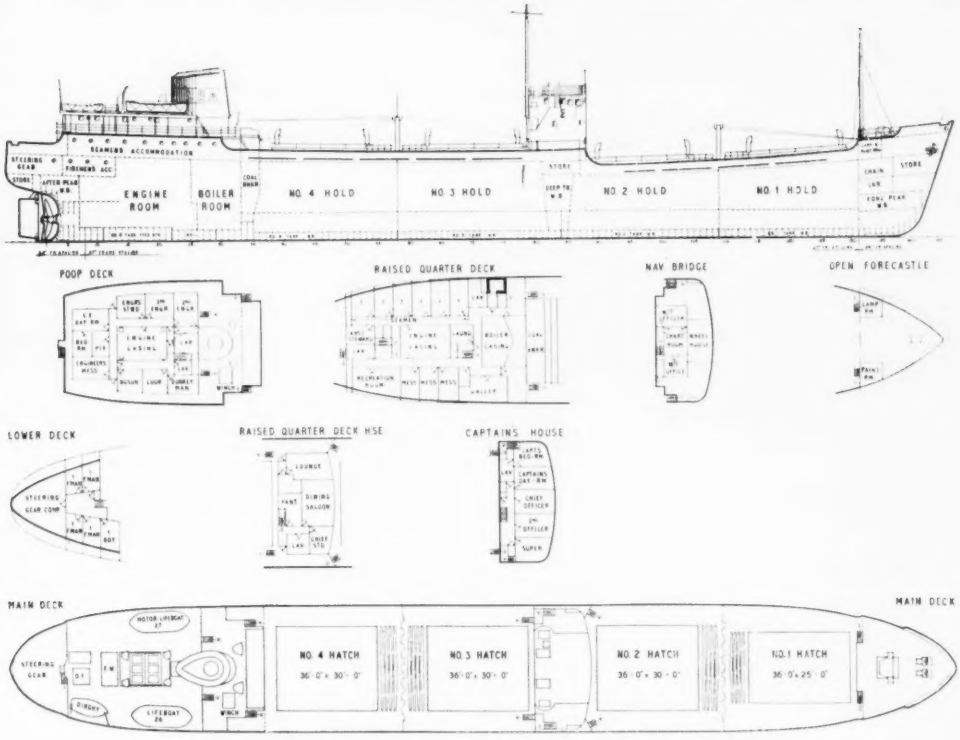
Spacious Accommodation

The accommodation in these vessels is exceptionally spacious for their size and type. Every member of the crew, including the boy, is berthed in a separate cabin, and these cabins are as large, if not larger, than those provided in many ocean-going ships. Each contains a bed, a locker, and a writing desk and chair. Seamen, firemen, and P.O.s and stewards have separate messes, and each category has a separate washing room equipped with basins, shower and W.C. There are also a crew's recreation room, and a laundry. All accommodation

The photograph above is of the *Cliff Quay*, the first of the series of six colliers for the B.E.A.



Crew cabins in these colliers are fitted with "Warerite" plastic sheet table tops and bulkhead linings



Profile and general arrangement of the collier "W. J. H. Wood"

for the crew is aft, as is that of the engineers. The officers are berthed amidships.

The accommodation of officers and engineers is on a similarly spacious scale, the captain and chief engineer having day and night cabins. The engineers have a mess with a pantry, and the officers a dining saloon and lounge. A cabin is provided for the superintendent, and this and the chief engineer's cabin have fitted basins. Bulkheads throughout the accommodation are of "Warerite" plastic panelling in various shades.

The all-electric galley is situated aft and is fitted with a stainless steel Moorwood range and auxiliary equipment. The pantry amidships is fitted with an electric cooker to supply light meals to the saloon, while a night pantry is also fitted with a Calor gas cooker for use when the electric supply is not available.

Navigational aids in the *W. J. H. Wood* include a Decca Navigator, echo sounder, and Chadburn electric engine and docking telegraphs. The vessel is wired for fitting radar at a later date.

The electro-hydraulic steering gear is of the double ram type with duplicated pumping units, controlled from the bridge by telemotor. The installation is by Donkin & Co., Ltd., with a Siemens' helm indicator incorporated.

Main Propelling Machinery

The propelling machinery has been installed by the North Eastern Marine Engineering Co. (1938), Ltd., at Sunderland. The main engine is a superheated triple-expansion direct-acting steam engine of the manufacturers' latest type, with cam-operated poppet valves to H.P. and M.P. cylinders. It incorporates the "North Eastern" reheat system. Two coal-fired cylindrical multitubular boilers give steam at a pressure of 220 lb. per sq. in., with a temperature of 700/750 deg. F. at the superheaters. They are fitted with the Howden forced draught system.

The machinery is designed for 1,275 i.h.p. in service, and on the measured mile trials, a mean speed of 12.03 knots was obtained in the fully loaded condition with an i.h.p. of 1,650. Two 60-kW steam generators supply current at 220 volts, and an emergency diesel generator of 25 kW is also fitted.

National Insurance Contributions for Foreign Seamen

The National Insurance Advisory Committee has been asked to consider and report upon the preliminary draft of regulations which would increase National Insurance contributions payable by employers for seamen in foreign-going ships, who are not domiciled and have no place of residence in the United Kingdom. The payment of contributions for such seamen is covered by special regulations under which the employers pay at a reduced rate, and the seamen themselves are excused from the liability to pay contributions. An increase in the rate of contributions is made necessary by the general increase in contribution rates which is to come into force on October 1, 1951 (as provided for under the National Insurance Act, 1946). It is proposed to increase the contribution rate for these seamen by an amount similar to the increase of the employer's contribution for other employed persons. Copies of the preliminary draft of the National Insurance (Mariners) Amendment Regulations, 1951, can be purchased from H.M. Stationery Office (price 3d.) or any bookseller. The Committee will consider written objections to them if sent before July 10, 1951, to the Secretary, National Insurance Advisory Committee, 30 Euston Square, London, N.W.1.

RECENT TECHNICAL DEVELOPMENTS

Improved Ship's Funnel

In the design and building of ships the problem of counteracting the tendency of smoke, ash and combustion gases discharged from the ship's funnel to be drawn over the deck aft of the funnel when the ship is in forward motion, owing to the relatively low pressure produced immediately aft of the funnel, has received a good deal of attention. This invention aims at providing a simple, effective, unobtrusive and inexpensive arrangement which can be applied to ship's funnels of conventional design for lifting the whole or the greater part of the funnel gases clear of the deck, at least aft of the funnel.

The invention is illustrated by the accompanying drawings, in which Fig. 1 is a vertical view of a funnel and casing embodying the invention, Fig. 2 is a plan view of the funnel and casing, and Fig. 3 is a horizontal sectional view taken on line 3-3 of Fig. 1. The cylindrical funnel (5), of circular cross section, is surrounded by the usual cylindrical casing (6), of elliptical cross-sectional shape, and provided with internal structural braces (7). A smaller auxiliary stack (8), for example for discharging galley smoke, may be mounted within the main funnel (5). The annular space between the funnel and casing may serve as a vent for discharging air from the stokehold.

An elliptical, upright steel wall (9) at the top of the funnel and mounted between the funnel and the casing extends to

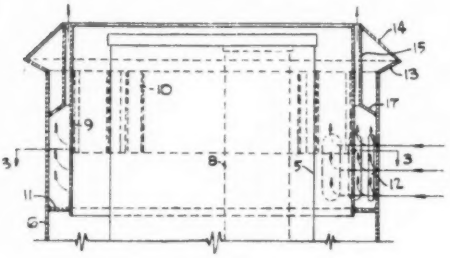


Fig. 1

a height slightly above the top of the funnel (5). It is provided with vertical guide plates (10), which are secured to the elliptical wall (9) only. An annular plate (11) is welded both to the bottom of the wall (9) and to the casing (6). The air intake sheath is defined by the casing (6) and wall (9) above the ring (11). One or more, for example six, air intake ports (12), preferably in the form of vertical slots, are provided in the forward part of the casing (6) forming the outer wall of the air intake sheath and above the ring (11). The casing (6) has a closing ring (13) at the top, which supports the inclined roof or cover (14). The latter is connected to an elliptical wall (15) closely spaced from the wall (9). The annular space defined between the walls (9) and (15) constitutes the air discharge sheath.

It is evident that when the ship is in forward motion, atmospheric air in front of the casing (6) causes air to enter the intake sheath through the ports (12). This air moves to the rear of the air intake sheath, wherein its velocity is increased and whence it emerges upwards as an air current surrounding and spaced from the funnel gases emerging from the funnel (5). Acceleration of the air current is primarily due to the fact that the thickness of the air discharge sheath is substantially less, for example one-third, of the thickness of the air intake sheath. Warming of the air from the funnel gases plays some part in accelerating the air. The accelerated air current lifts the funnel gases and prevents or minimises the downflow of funnel gases on to the deck behind the funnel. The additional air from the stokehold or other compartments, which rises between the funnel (5) and the casing (6) provides an additional upward stream of air, the velocity of which is determined largely by its temperature and assists usually only slightly in lifting the funnel gases.

The relative thicknesses of the air intake and air discharge sheaths must be such as to ensure adequate lifting of the funnel gases in normal steaming conditions. The required ratio of thickness may, for example, be of the order of 3 : 1.

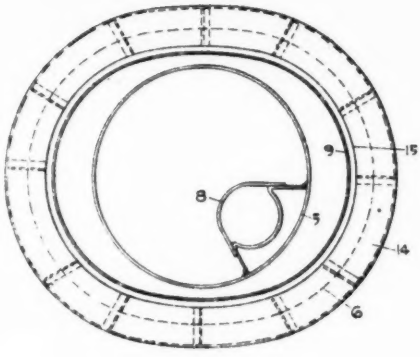


Fig. 2

In an actual ship with a funnel of 11 ft. in diameter and elliptical outer casing having major and minor diameters of 16 ft. 6 in. and 14 ft. 6 in., the following arrangement has, for example, been found effective: the inner wall (9) is formed by an elliptical plate having major and minor diameters of 15 ft. and 13 ft. and extending down from the funnel top to a depth of 9 ft. The outer wall of the air intake sheath is constituted by the wall of the outer casing (6), and the outer wall (15) of the air discharge sheath is an elliptical plate having major and minor diameters of 15 ft. 6 in. and 13 ft. 6 in. extending from the funnel top to a depth of 2 ft. The thickness of the air intake sheath is thus 9 in. and that of the air discharge sheath is 3 in. The casing (6) has six air intake ports (12), each 1 ft. wide and 4 ft. 6 in. in height.

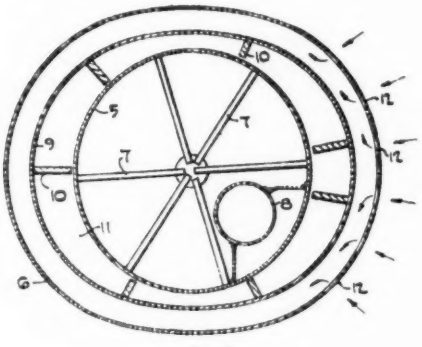


Fig. 3

British Patent No. 646,602 *issued to the Anglo-Saxon Petroleum Co., Ltd., and J. Lamb. Application Date: April* 22, 1948; *complete specification published November* 22, 1950.

The new motorship *Shanklin* has entered service in the Portsmouth-Isle of Wight fleet of British Railways (Southern Region). Of 965 tons gross, the *Shanklin* has a length of 200 ft. overall and a breadth moulded of 46 ft. Almost identical in appearance to the *Southsea* and *Brading*, which have been in service since 1948, slight alterations in the design of the *Shanklin* have increased passenger-carrying capacity to 1,377. All three ships were built at Dumbarton by Wm. Denny & Bros., Ltd. Propulsion is by twin screws, directly driven by two Denny-Sulzer 8-cyl. diesel engines, each rated at 950 b.h.p. at 380 r.p.m. for a full service speed of 14½ knots. The new *Shanklin* replaces the paddle steamer of the same name, which carried more than 10,000,000 passengers in 26 years service, and has now been sold to the Red Funnel Line.

ROUND THE SHIPYARDS

Work in Progress on the South Coast

By THE SHIPPING WORLD'S Own Correspondent

No orders for new construction have been reported in the Hampshire area during the past few weeks, and the principal activity has been confined to the ship repair and refitting side of the industry. John I. Thornycroft & Co., Ltd., has gone forward with the fitting out of H.M.S. *Duchess*, the Peruvian gunboats *Maranon* and *Ucayali*, and a 600-tons floating dock for the Peruvian Government. In addition, there are still on the stocks the hull of a 5,000-tons gross passenger vessel for Fred Olsen & Co.'s Oslo and Newcastle-on-Tyne service, a 650-tons survey and salvage vessel for the Mersey Docks & Harbour Board, and a 393-tons tug for the Suez Canal Company. Smaller tonnage in various stages of construction at Thornycroft's Woolston shipyard includes two twin-screw motor pilot cutters for the Karachi Port Trust, one pilot launch for service in Nigeria, ordered by the Crown Agents for the Colonies, and a passenger launch and a towing launch for Ralli Brothers.

Demands on accommodation for repairs, refitting and conversion work have been so great recently that certain yards have been compelled to take advantage of berths available in Southampton Docks, their own fitting-out berths being fully occupied. Thornycroft's is one such company, having work in the firm's own yards at Woolston and Northam, and in Southampton Docks. Perhaps the most comprehensive repair work at present being undertaken by the firm is that of the "V" type destroyer *Vigilant*, which is being converted into a fast frigate. Other repair work is being carried out, including the normal voyage requirements.

Harland & Wolff, Ltd., has had its customary amount of voyage or running repairs, with work at Southampton Docks and Fawley. The company has had a daily average of about ten ships to deal with during the past five weeks. These included the Cunard liners *Caronia* and *Mauretania*, the Royal Mail Lines' *Andes* and *Alcantara*, and vessels of the Union-Castle Line. Camper & Nicholsons, Ltd., at Northam, has been engaged on the fitting out and engining of the coastal tanker *Kluang*, launched last month for the Anglo-Saxon Petroleum Co.'s Singapore service. She has a carrying capacity of about 250 tons of spirit, and is 141 ft. 3 in. in length and 24 ft. 6 in. in breadth. She is installed with a Crossley diesel engine developing 425 b.h.p. at 400 r.p.m. Auxiliary generators, also by Crossley Brothers, are used for operating the Stothert & Pitt cargo pumps.

Conversion to Frigate

At the estuary of the River Medina, Isle of Wight, J. Samuel White & Co., Ltd., is fitting out the destroyer H.M.S. *Dainty*, and building the refrigerated cargo vessel *Kadoura* for the Chargeurs Reunis. On the shiprepairing side the firm has had H.M.S. *Ready* in hand for refit and the Egyptian Government vessel *Ibrahim*, formerly the "Hunt" class destroyer *Cottesmore*, for alterations and refit. The biggest job at present being carried out is the conversion into a fast frigate of the destroyer *Volage*, built by White's in 1943. The yard has completed this year the hundredth Watson cabin type lifeboat for the R.N.L.I. She is intended for the Aberdeen station.

To the westward, Philip & Son, Ltd., Dartmouth, launched the 900-tons gross passenger ferry *Leasowe*, building for the Wallasey Corporation, and intended for the Liverpool-Seacombe and New Brighton service. Of 145 ft. length b.p., 34 ft. breadth moulded and 12 ft. 3 in. depth moulded, she is to be fitted with two Crossley H.R.L.8 diesel engines, each of 640 b.h.p. at 370 r.p.m., driving twin screws. There will be accommodation for 1,350 passengers on three decks. She is the first of two vessels building for the same owners. Altogether Philip's have had a dozen vessels in course of construction during the past few weeks, including a harbour salvage vessel for Cia. Sud Americana de Vapores, Valparaiso.

Silley Cox & Co., Ltd., of Falmouth, has been busy with tanker drydocking and repair work, and among ships at the yard during the past month were the *British Swordfish*, *British Tenacity*, and *British Resolution*. In the Bristol Channel, Charles Hill & Sons, Ltd., has under construction a coastal tanker of 500 tons for the National Benzole Co., a grab hopper dredger for the Nelson Harbour Board, New Zealand, and a twin-screw diesel tug for the Port of Bristol Authority, while five other ships are on order. During May, the firm dealt with a considerable number of vessels for drydocking repairs of every description at Bristol and Avonmouth.

STORY OF LIFEBOAT DESIGN

100th R.N.L.I. Lifeboat Delivered by Samuel White's

THE 100th lifeboat for the Royal National Lifeboat Institution has been delivered by J. Samuel White & Co., Ltd., Cowes, Isle of Wight. Destined for the Aberdeen station, the boat is a 52 ft. by 13 ft. 6 in. Watson cabin-type with midships steering. The displacement, with crew and gear, in service conditions, is 28.5 tons, with load draughts of 3 ft. 10¾ in. forward and 4 ft. 8½ in. aft. Safe carrying capacity in fine weather is about 145 persons, but in rough weather this is reduced to about 100. The angle of maximum stability is 40 deg. Two VE6 diesel engines, specially designed for the R.N.L.I., drive out-turning propellers operating in tunnels through reduction gears at 600 r.p.m., giving a speed of 9 knots. Fuel tanks give a full-speed range of about 215 nautical miles (24 hours' steaming) or a cruising range of 376 miles (47 hours).

It was in 1846 that John and Robert White, with Mr. Lamb, patented the Lamb & White lifeboat. Its lines were based on those of a whaler, and its inventors considered that the power to right itself after capsizing was of less importance than its ability to keep right side up and to sail well. There was considerable opposition to this proposition, however, and it was not until 1887, when George Lennox Watson became naval architect to the Institution, that the self-righting principle was considered not to be essential; and today only 18 of the Institution's 156 lifeboats are self-righting.

The first steam lifeboats were built in 1898, when J. Samuel White received an order for two. These were 36 ft. 6 in. long by 14 ft., with engines of 180 h.p. giving a speed of 9¼ knots. A petrol engine was first installed in a lifeboat in 1904, but White's did not build any more for the R.N.L.I. until 1920, when an order for 13 petrol-engined boats was obtained. Twin engines were installed in the 60-ft. New Brighton lifeboat in 1921, but the practice of installing twin engines was not general until 1925. Diesel engines superseded petrol engines in 1937, after the Cowes builders had carried out an experimental installation of diesel engines in a petrol-engined boat.

There has been little alteration to the hull as designed by Watson, although the size and accommodation has changed. There is an after cabin and a cabin forward of the engine room, each seating 12 persons. All engine controls are led to the midships steering position. The engines and all accessories are completely watertight, and can be stopped, started and run even when the engine room is flooded.

Film Records of Shipbuilding

A new service which is being increasingly used by shipbuilders and shipowners on the Clyde is the production of film records of construction, launching and trials. The recently delivered Wallasey Ferry *Royal Iris* was the star of such a film record, made in this instance for publicity purposes. In many instances the films are designed purely for building record purposes, although shipowners and shipbuilders alike appreciate the publicity value of a record of so flexible and interesting a nature. The service was sponsored on the Clyde by Mr. John C. Elder, a film producer who is himself a small-boat enthusiast. He has completed one film for the Fairfield yard showing the construction, interiors, launching and trials of the *Ciudad de Medellin*. A similar record is in progress on a second South American ship. Other Clyde yards have commissioned such film records and are building up complete libraries on film as a complement to the "still" records which have been maintained to date.

Refrigerated Cargo Liner "Port Adelaide"

The single-screw refrigerated and general cargo liner *Port Adelaide* has been completed by R. & W. Hawthorn, Leslie & Co., Ltd., for the Port Line, Ltd. A motorship of about 8,050 tons gross, she carries a deadweight of about 10,700 tons with a mean draught to summer marks of 28 ft. 8½ in. Her principal dimensions are 460 ft. length b.p., 64 ft. 6 in. breadth moulded and 41 ft. 6½ in. depth moulded to upper deck. The insulated cargo space totals 365,000 cu. ft., while there is space for 225,000 cu. ft. of general cargo. Supplied by the shipbuilders, the main engine comprises a 6-cylinder two-stroke single-acting Doxford-type diesel developing 7,500 b.h.p. and providing a speed of 15¾ knots

Train Ferry from Elsinore

Built by the Elsinore Shipbuilding & Engineering Co., Ltd., the twin-screw train ferry *Dronning Ingrid* has entered the Danish State Railways' service across the Storebaelt. She is a motorship of 2,950 tons gross, with dimensions of 353.7 ft. length o.a., 58.1 ft. breadth on fenders and 21.1 ft. depth to train deck. The ferry has three tracks with an effective length of 853 ft. and carries a total of 1,500 passengers. The propelling machinery has been supplied by the shipbuilders and consists of two 6-cylinder two-stroke single-acting B. & W. type diesel engines, developing together 5,400 i.h.p. and giving the vessel a loaded speed of 16½ knots

Swedish Cargo Motorship "Itajai"

Of about 2,300 tons gross, the single-screw cargo motorship *Itajai* has been delivered to Rederi A B Poseidon, of Stockholm, by Oresundsvarvet A B, Landskrona. With a deadweight of 3,800 tons on a draught of 19 ft. 3 in., she has dimensions of 330 ft. length b.p., 47 ft. breadth moulded and 19 ft. 10 in. depth moulded to main deck. The four cargo hatches are served by eight 5-ton and two 10-ton derricks, while at No. 2 hatch there is a 25-ton derrick for the heavy lifts. A fully loaded speed of 14½ knots is maintained by an 8-cylinder two-stroke single-acting diesel engine. Supplied by A B Gotaverken, Gothenburg, this engine develops 3,700 b.h.p.

NEW CONTRACTS

Yards in Great Britain and Northern Ireland

Shipowners	No. of Ships	Type	Approximate Tonnages Gross	Deadweight	Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
Alva S.S. Co.	1	Cargo*	—	10,000	—	—	Harland-B. & W. diesel	4,400	Harland & Wolff	Short Bros.
A. G. Pappadakis, New York	1	Cargo*	—	10,000	—	—	Reheat steam	3,150	N.E. Marine	Short Bros.
Parana Cia. de Vapores, Panama	1	Cargo	—	10,250	—	—	Diesel	5,600	Sulzer Bros., Winterthur	Short Bros.
Damps. A/S Sverre, Bergen	1	Cargo	—	9,250	—	—	Harland-B. & W. diesel	4,400	John G. Kincaid	Short Bros.
Norness Shipping Co., Inc., Panama	2	Cargo	—	10,250 (each)	—	—	Harland-B. & W. diesel	5,500 (each)	John G. Kincaid	Short Bros.
Los Bros. & A. K. Pezas, Chios	1	Cargo	—	10,000	—	—	Harland-B. & W. diesel	4,400	Harland & Wolff	Short Bros.
Cia. Farallon de Nav., S.A., Panama	1	Cargo	—	11,000	—	—	Harland-B. & W. diesel	5,000	John G. Kincaid	Short Bros.
British Rlys.	2	General purpose vessel	—	—	—	15	Polar diesel	—	British Polar Engines	Wm. Denny
British Rlys.	1	General purpose vessel	—	—	—	15	Polar diesel	—	British Polar Engines	Ailsa S.B.
British Rlys.	2	Passenger	—	—	160 (long)	15	Polar diesel	—	British Polar Engines	A. & J. Inglis
British Rlys.	1	Passenger	—	—	160 (long)	15	Polar diesel	—	British Polar Engines	Yarrow & Co.
British Rlys	1	Passenger	—	—	160 (long)	15	Polar diesel	—	British Polar Engines	Ardrossan Dock-yard
Irish Shipping, Ltd.	1	Cargo	—	9,000	440 × 57.5 × 25.5	13	Steam	—	Shipbuilders	Wm. Gray
Irish Shipping	2	Cargo	—	9,500 (each)	460 × 60 × 27	—	Doxford diesel	—	—	Wm. Gray
Royal Mail Lines	1	Cargo liner	9,200	10,700	470 b.p. × 68 × 41	16	Sin.-scr. dble.-red. geared turbine	—	Shipbuilders	Harland & Wolff, Belfast
Pacific S.N. Co.	1	Cargo liner	8,500	11,100	—	16.5	Dble.-red. geared Parsons turbine	—	Shipbuilders	Wm. Denny
A. G. Pappadakis, New York	1	Cargo	—	11,000	—	14	Sin.-red. geared turbine	—	Shipbuilders	Wm. Denny
Hellenic Lines, Piraeus	2	Cargo	—	10,500 (each)	450 × 64	—	Doxford diesel	6,600 (each)	D. Rowan	Wm. Hamilton

Commonwealth and Foreign Yards

Unterweser Reederei A.G., Bremen	1	Cargo	6,000	10,000	473.8 o.a. × 60.4 × 25.6	—	Diesel	—	—	Flensburger Schiffs. Ges.
Socony-Vacuum Oil Co., New York	1	Tanker	—	27,000	—	—	—	—	—	Sun S.B. & D.D. Co., Chester, Pa.
Socony-Vacuum Oil Co.	1	Tanker	—	28,300	—	—	—	—	—	Bethlehem Steel Co., Quincy, Mass.
Caribbean Land & Shipping Corpn.	2	Tankers	—	18,000 (each)	540 b.p. × 72 × 37.8	—	Diesel	7,200	—	Deutsche Werft, Hamburg
Fisser & van Doornum, Emden	1	Cargo	6,200	9,600	—	12	M.A.N. diesel	3,350	—	Nordseewerke, Emden
N. V. Thalatta, Amsterdam	1	Tanker	—	18,500	556 × 72.75 × 38.25	15	Stork diesel	8,000	—	Netherlands Dock & S.B. Co., Amsterdam
Soc. Francaise de Transports Petroliers S.A., Paris	1	Tanker (to be named *Poipou*)	—	19,500	—	—	Doxford diesel	7,750	Shipbuilders	Wilton-Fijenoord
—	1	Tanker	—	28,300	595 b.p. × 84 × 44	—	Steam turbine	13,750	—	Bethlehem-Sparrows Point Shipyard, Md.

* Additional particulars of contracts previously reported in THE SHIPPING WORLD.

LAUNCHES

Yards in Great Britain and Northern Ireland

Date	Shipowners	Ship's Name and/or Yard No.	Type	Approximate Tonnages Gross	Deadweight	Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
June 1	Esso Pet. Co.	*Esso Middlesex* (S.675)	Tank lighter	131	—	—	—	Non-propelled	—	—	Richard Dunston, Hessle
June 4	J. Marr & Son	*Velia* (839)	Trawler	330	—	140 o.a. and 123.5 b.p. × 26.5 × 13	—	7-cyl. Mirrlees diesel	700	—	Cook, Welton & Gemmell
June 7	British Tanker Co.	*British Realm* (749)	Tanker	18,700	28,100	610 b.p. × 81 × 44.5 × 34	—	Sin.-scr. dble.-red geared turbine	—	—	Fairfield S.B.
June 7	Cia. Atlantica y Pacifica	*Clydewater* (663)	Tanker	13,070	19,000	—	—	6-cyl. Doxford diesel	—	Shipbuilders	John Brown
June 7	Anglo-Saxon Pet. Co.	*Jeladan* (166)	Lighter	150	—	—	—	Tw.-scr. diesel	—	—	Clelands (Successors)
June 7	United Whalers	*Setter VIII*	Whale catcher	586	—	—	—	Fredriksstad steam motor	—	—	A. & J. Inglis

TRIAL TRIPS

Yards in Great Britain and Northern Ireland

Date	Shipowners	Ship's Name and/or Yard No.	Type	Approximate Tonnages Gross	Deadweight	Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
May —	Den Norske Amerikalinje A/S, Oslo	*Kongsfjord* (1061)	Cargo	6,000	8,600	450 × 57.7 × 26.2	15	Sin.-scr., 5-cyl., 2-str. diesel	—	John G. Kincaid	Lithgows
June 6	Rederi A.B. Wallenco, Stockholm	*Aida* (475)	Tanker	9,940	13,800	500 o.a. and 470 b.p. × 64 × 35.5	13.5	Sin.-scr., 4-cyl. Doxford diesel	4,400	Vickers-Armstrongs	Caledon S.B.
June 12	British Tanker Co.	*British Craftsman* (783)	Tanker	8,690	12,250	490 o.a. × 62 × 33.9	—	Sin.-scr., 4-cyl., 2-str. diesel	—	Shipbuilders	Wm. Doxford

MARITIME NEWS IN BRIEF

From Correspondents at Home and Overseas

THE Cunard Line's programme of dollar cruises from New York next winter will be undertaken by the liners *Caronia*, *Britannic* and *Mauretania*. The *Caronia* is to sail from New York on January 5 on an African and Indian cruise of nearly 24,000 miles. Twenty-four ports of call are featured in her itinerary, which will end at Southampton early in April. A Mediterranean cruise of 12,000 miles, beginning from New York on February 1 is planned for the *Britannic*. She will be visiting 20 ports. Four cruises from New York to the West Indies are being arranged for the *Mauretania*, to be made during February, March and April, and prior to her main cruise the *Caronia* will make a 12-days' Christmas and New Year cruise to the West Indies.

IN VIEW of a general rise in the running costs, the Polish Ocean Lines is to maintain until further notice the 15 per cent winter addition to freight rates on the line Gdynia-Antwerp-Rotterdam-Amsterdam. In addition, the freight rates on the Gdynia-Copenhagen line have been raised by 15 per cent, and on the line connecting Polish ports with the Near East the rates have been increased by 20 per cent.

THE Polish liner *Batory* (14,287 tons) has arrived at Palmers Hebburn Co., Ltd., for dry docking, painting and alterations before being transferred in August to a new passenger service from Gdynia to Karachi and Bombay.

THE address of the Evans & Reid Coal Co., Ltd., as from June 23, will be Bevis Marks House, Bevis Marks, London, E.C.3. Telephone: AVEnue 4757; telegrams: Evantelle, Ald, London.

AMONG passengers who arrived at Liverpool last week in the *Empress of Canada* was Captain R. W. McMurray, managing director of Canadian Pacific Steamships, Ltd.

* * * *

AN EXHIBITION at the Science Museum, South Kensington, was opened on June 18 to celebrate the golden jubilee of the British Standards Institution. It is entitled "British Standards—The Measure of Industrial Progress," and will remain open until June 28. The displays cover 50 of the country's main industries in which the work of the British Standards Institution has played an important part. The iron and steel industry, out of which came the national standards movement, has a large exhibit illustrating the application of nearly 400 standards covering the use of steel in many industries, including shipbuilding.

THE Iino Marine Transport Co. has bought the 18,750-tons *Conte Verde*, former Italian luxury liner on the Far Eastern route, for £195,400. The liner was scuttled in September 1943, following the Italian surrender, while lying at anchor off Shanghai. The Japanese Navy refloated the ship and rebuilt her as a troop transport, but she was sunk later by Allied aircraft. The liner was salvaged in January 1949, and was returned to the Italian Government.

FOUR cargo ships being built at William Doxford & Sons, Ltd., Sunderland, for T. & J. Harrison, of Liverpool, will be equipped to run on heavy oil. They will be the first dry cargo ships with Doxford diesel engines to operate on heavy oil, although several tankers for the British Tanker Co., Ltd., have been equipped in this manner.

MR. E. HALDER, port superintendent, Middlesbrough, and Mr. P. Collins, of the Tees Conservancy Commissioners, are to act as lecturers for the certificate course for port workers to be held at Constantine Technical College, Middlesbrough.

THE DEATH has occurred at the age of 73, of Mr. Ernest Sutcliffe, of Stewton Hall, near Grimsby, chairman and managing director of John Sutcliffe & Son (Grimsby), Ltd., shipping agents and importers.

MR. ARTHUR HILLIER, O.B.E., chairman and managing director of The Sperry Gyroscope Co., Ltd., has been appointed a Justice of the Peace for the County of Middlesex.

* * * *

AT A special meeting of the General Committee of Lloyd's Register of Shipping held last week Sir Ronald Garrett was re-elected chairman for the ensuing year, Mr. A. E. M. Gale, deputy-chairman and treasurer, Sir Guy Ropner, deputy-chairman and chairman of the sub-committees of classification, and Mr. R. M. Turnbull, vice-chairman of the sub-committees of classification. Mr. A. F. Hull, chairman of Ellerman Lines, Ltd., was elected a member of the General Committee.

AT the monthly meeting of the Tees Conservancy Commission it was reported that imports during April, at 184,501 tons, were down by 6,833 tons on last year. This is chiefly due to decreases in imports of iron ore, scrap and manganese ore. Exports, however, increased from 127,344 tons to 134,177 tons. During the month 310 ships were cleared, against 297 in April last year.

MR. ROBERT H. CAIN has been appointed general manager of The Shell Company of West Africa, Ltd. He joined the Shell group of companies in 1928. As a major in the First Airborne Division he won the Victoria Cross at Arnhem, and was the only one of five recipients of the award to survive the action.

STEEL production in May, which was affected by the Whitsun holidays, was at an annual rate of 15,864,000 tons compared with 16,597,000 tons in May 1950. Pig iron output was at an annual rate of 9,482,000 tons in May compared with a rate of 9,646,000 tons a year ago.

A GIFT of some £16,000 has been made to King George's Fund for Sailors by the Royal Naval War Libraries, which have now closed down. This gift is for educational purposes, and for the provision and maintenance of libraries and schools attended by children of naval parents.

THE steamer *Glen I* arrived at Swansea Docks last week with a cargo of over 10,000 tons of zinc concentrates from Newfoundland, the largest cargo of this commodity to be received at the port since the war.

MR. FRANK ATKINSON, partner in E.P. Atkinson & Sons, is the newly elected vice-chairman of the Coasting and Home Trade Tramp Section of the Chamber of Shipping. Mr. Atkinson is also chairman of the Goole Shipowners' Association and is a former president of the Goole Chamber of Commerce and Shipping. During the Second World War he was an Assistant Director of Sea Transport at the Ministry of War Transport

MR. G. T. W. WHITEHEAD, assistant general manager of Johnson & Phillips, Ltd., was awarded the O.B.E. in the King's Birthday honours list. Mr. Whitehead joined Johnson & Phillips as an engineering apprentice 36 years ago. In 1946 he was appointed assistant general manager (works), later the same year becoming a director of the domestic appliance works when it was removed to a development area in Scotland under the name of British National Electrics, Ltd. During the Second World War he played a leading part in Operation "Pluto" while he was production manager of the company's Charlton works

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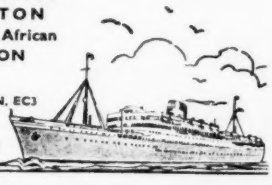

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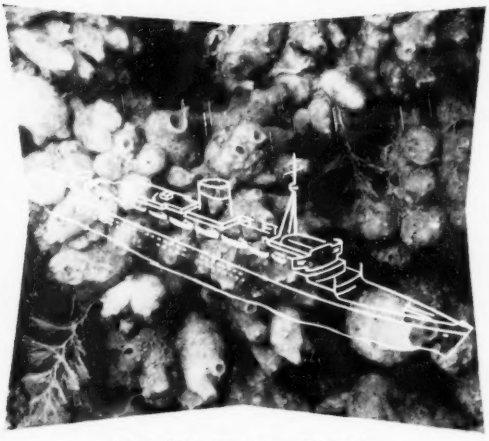

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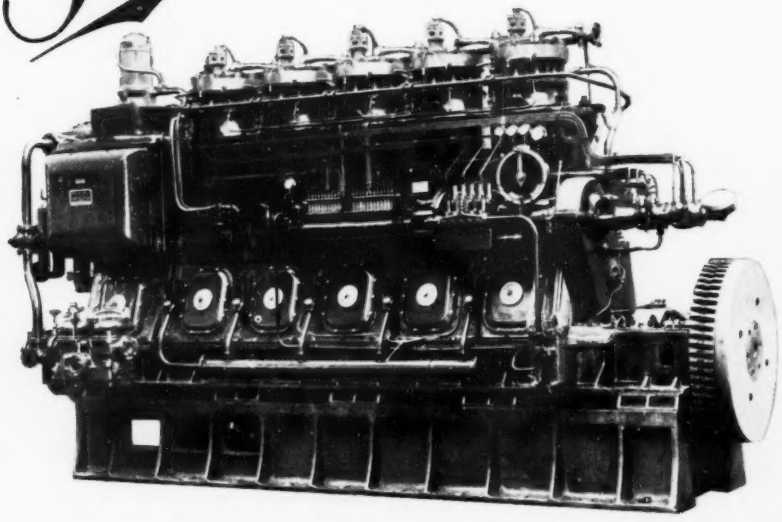

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